

		Table 2 – Buc	Table 2 – Budget, 2006 dollars			
	Proposal Title: Santa Barbara Countywide Implementation	tion Grant Proposal				
	Project Title: Summary Budget					
	Budget Category	Other State Funds	Non-State Share (Funding Match)	Requested Grant Funding	Total	% Funding Match
(a)	Direct Project Administration Costs	\$0.00	\$992,693.36	80.00	\$992,693.36	
(p)	Land Purchase/Easement	\$0.00	\$328,560.00	\$0.00	\$328,560.00	
<u> </u>	Planning/Design/Engineering/Environmental Documentation	\$678,208.00	\$3,907,061.20	\$317,400.00	\$4,902,669.20	
(p)	Construction/Implementation	\$53,216,553.00 \$121,600.00	\$38,520,715.45 \$91,615,668.45	\$24,357,700.00	\$116,094,968.45	
(e)	Environmental Compliance/ Mitigation/Enhancement	\$0.00	\$602,105.00	80.00	\$602,105.00	
(£)	Construction Administration	80.00	\$3,350,946.31	\$39,600.00	\$3,390,546.31	
(g)	Other Costs	80.00	\$659,530.00	\$0.00	\$659,530.00	
(h)	Construction/Implementation Contingency	80.00	\$13,327,960.78	\$285,300.00	\$13,613,260.78	
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$53,894,761.00 \$121,600.00	\$61,689,572.09 \$114,784,525.09	\$25,000,000.00	\$140,584,333.09	
Ð	Calculation of Funding Match % (Used in Funding Match Scoring Criterion) Optional for individual component projects.		\$61,689,572.09 \$114,784,525.09		\$140,584,333.09	44% 829%
Sour	Sources of Funds for Non-State Share (Funding Match) and Other State Funds	See Individual Project Tables Other State Funds includes \$5 See clarification Sources for N	See Individual Project Tables Other State Funds includes \$53,894,761 of SRF Loan Funding for Project 15. See clarification Sources for Non-State Share (Funding Match) in Budgets for Projects 13 and 15.	Loan Funding for Proje unding Match) in Budge	ct 15. ets for Projects 13 and 1	5.

		Table B-1 - Budget (Table B-1 – Budget (continued), 2006 dollars	10		
	Proposal Title: Santa Barbara Countywide Implementation Grant Proposal	Grant Proposal				
	Project Title: Project 15 - Vandenberg Village Community 9	Services District, Lomp	unity Services District, Lompoc Regional Wastewater Reclamation Plant Upgrade	r Reclamation Plant U	<u>pgrade</u>	
	Budget Category	Other State Funds	Non-State Share (Funding Match)	Requested Grant Funding	Total	% Funding Match
(a)	Direct Project Administration Costs	80.00	\$115,684.00	80.00	\$115,684.00	
(p)	Land Purchase/Easement	\$0.00	\$0.00	\$0.00	\$0.00	
(c)	Planning/Design/Engineering/Environmental Documentation	\$0.00	\$0.00	\$0.00	\$0.00	
(p)	Construction/Implementation	\$52,094,953.00 \$0.00	\$22,347,420.00 \$75,442,373.00	\$4,000,000.00	\$79,442,373.00	
(e)	Environmental Compliance/ Mitigation/Enhancement	80.00	80.00	80.00	\$0.00	
(f)	Construction Administration	80.00	\$1,148,918.00	\$0.00	\$1,148,918.00	
(g)	Other Costs	80.00	\$0.00	\$0.00	\$0.00	
(h)	Construction/Implementation Contingency	80.00	\$7,944,237.00	\$0.00	\$7,944,237.00	
(i)	Grand Total (Sum rows (a) through (h) for each column)	\$52,094,953.00 \$0.00	\$31,556,259.00 \$84,651,212.00	\$4,000,000.00	\$88,651,212.00	
Ĵ	Calculation of Funding Match % (Used in Funding Match Scoring Criterion) Optional for individual component projects.					
Sourc	Sources of Funds for Non-State Share (Funding Match) and Other State Funds	VVCSD will utilize was The City of Lompoc wi Match).Vandenberg Ai	VVCSD will utilize wastewater ratepayer revenues as to provide \$5,043,313 of the Non-State Share (Funding Match). The City of Lompoc will use funding from Bonds issued in Febuary 2007 for \$12,138,416 of Non-State Share (Funding Match).Vandenberg Air Force base will use Federal funding for their Funding Match share of \$14,258,846.	ies as to provide \$5,043, i issued in Febuary 2007 leral funding for their F	313 of the Non-State Sh 7 for 812,138,416 of Nor unding Match share of \$	are (Funding Match). r-State Share (Funding 114,258,846.
		Source of Other State F	Source of Other State Funds is SRF Loan Funding.	ng.		

Page 16 of 16



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Lompoc Regional Wastewater Reclamation Plant Upgrade Project Local Funding Payment Breakdown by Fiscal Year

Local Match (Payments to City of Lompoc)

_	(Payments to City	of Lompoc)		
Fiscal Year	VVCSD	VAFB	City of Lompoc Share	PROJECT TOTAL
30-Jun-05	81,769	0	0	81,769
30-Jun-06	383,980	102,406	419,813	906,199
30-Jun-07	43,126	102,387	419,732	565,245
30-Jun-08	340,671	274,677	856,571	1,471,919
30-Jun-09	353,342	293,037	903,073	1,549,451
30-Jun-10	353,323	293,763	906,088	1,553,174
30-Jun-11	873,832	1,378,236	3,666,280	5,918,348
30-Jun-12	874,446	1,379,687	3,670,840	5,924,973
30-Jun-13	874,232	1,441,224	3,668,904	5,984,360
30-Jun-14	873,962	1,440,910	3,668,103	5,982,975
30-Jun-15	874,380	1,441,414	3,669,386	5,985,181
30-Jun-16	873,971	1,441,696	3,670,103	5,985,770
30-Jun-17	874,224	1,441,562	3,669,762	5,985,548
30-Jun-18	874,352	1,442,219	3,671,435	5,988,005
30-Jun-19	874,322	1,441,252	3,668,973	5,984,546
30-Jun-20	874,203	1,441,117	3,668,629	5,983,949
30-Jun-21	873,995	1,440,613	3,667,347	5,981,954
30-Jun-22	874,362	1,441,874	3,670,558	5,986,795
30-Jun-23	873,863	1,440,426	3,666,872	5,981,161
30-Jun-24	873,930	1,440,721	3,667,623	5,982,274
30-Jun-25	873,870	1,440,529	3,667,134	5,981,534
30-Jun-26	873,684	1,440,994	3,668,317	5,982,995
30-Jun-27	874,019	1,440,692	3,667,548	5,982,259
30-Jun-28	874,191	1,440,983	3,668,290	5,983,464
30-Jun-29	874,094	1,441,668	3,670,033	5,985,796
30-Jun-30	873,831	1,440,557	3,667,206	5,981,594
30-Jun-31	131,584	356,141	906,624	1,394,350
30-Jun-32	131,696	357,068	908,984	1,397,748
30-Jun-33	131,606	356,078	906,463	1,394,147
30-Jun-34	131,316	356,682	908,001	1,396,000
30-Jun-35	131,569	356,389	907,253	1,395,211
30-Jun-36	131,588	192,258	489,429	813,275
30-Jun-37_	131,372	191,943	488,626	811,941
Total =	19,958,704	31,931,204	82,394,002	134,283,910

The costs for this project have been financed by the City of Lompoc but all costs are shared with Vandenberg Village Community Services District (VVCSD) and Vandenberg Air Force Base (VAFB) proportionally to the utilization of plant capacity. The total project cost is \$134 Million, including interest from financing. VVCSD will pay \$20 Million (16.18%) funded by wastewater rates, VAFB will pay \$32 Million (23.64%) from federal funding, and the City of Lompoc will pay the remaining \$82 Million (60.18%) from wastewater service fees.

VANDENBERG VILLAGE COMMUNITY SERVICES DISTRICT

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Lompoc Regional Wastewater Reclamation Plant Upgrade Project Proposition 50 Local Funding Match Breakdown by Fiscal Year 2006 Dollars

		Discount	Payments to 0	City of Lompoc	City of Lompoc	FUNDING
Fiscal	Year	Factor	VVCSD	VAFB	Share ¹	MATCH TOTAL
	_ 30-Jun-05	-	-	-	-	-
Begin Prop 50	30-Jun-06	-	-	-	-	-
Cost Match	30-Jun-07	1.06	40,685	96,592	12,138,416	12,275,691
	30-Jun-08	1.12	303,196	244,462	-	547,658
	30-Jun-09 ²	1.19	-3,703,328	246,039	-	-3,457,288
	30-Jun-10	1.26	279,865	232,688	-	512,553
	30-Jun-11	1.34	652,978	1,029,898	-	1,682,876
	30-Jun-12	1.42	616,450	972,625	-	1,589,075
	30-Jun-13	1.50	581,414	958,497	-	1,539,911
	30-Jun-14	1.59	548,335	904,045	-	1,452,379
	30-Jun-15	1.69	517,544	853,171	-	1,370,715
	30-Jun-16	1.79	488,021	805,035	-	1,293,056
	30-Jun-17	1.90	460,530	759,397	-	1,219,927
	30-Jun-18	2.01	434,526	716,739	-	1,151,264
	30-Jun-19	2.13	409,916	675,715	-	1,085,631
	30-Jun-20	2.26	386,661	637,407	-	1,024,068
	30-Jun-21	2.40	364,687	601,117	-	965,805
	30-Jun-22	2.54	344,189	567,589	-	911,778
	30-Jun-23	2.69	324,521	534,923	-	859,445
	30-Jun-24	2.85	306,176	504,748	-	810,924
	30-Jun-25	3.03	288,825	476,114	-	764,939
	30-Jun-26	3.21	272,419	449,309	-	721,728
	30-Jun-27	3.40	257,097	423,787	-	680,885
	30-Jun-28	3.60	242,592	399,880	-	642,473
	30-Jun-29	3.82	228,835	377,425	-	606,260
	30-Jun-30	4.05	215,818	355,787	-	571,604
	30-Jun-31	4.29	30,659	82,980	-	113,639
	30-Jun-32	4.55	28,948	78,487	-	107,435
	30-Jun-33	4.82	27,291	73,839	-	101,130
	30-Jun-34	5.11	25,689	69,778	-	95,467
	30-Jun-35	5.42	24,282	65,774	-	90,056
	30-Jun-36	5.74	22,911	33,474	-	56,385
	30-Jun-37	6.09	21,579	31,528	<u> </u>	53,106
	Total	_	5,043,313	14,258,846	12,138,416	31,440,575

¹City of Lompoc share includes Revenue Bond issued in 2007, annual payments not attributed to funding match because the City of Lompoc has taken out an SRF Loan to finance their remaining share of the project.

²Total for 2009 FY includes subtraction of \$4,000,000 Prop 50 Grant Award from funding match for VVCSD





REMIT TO:

805-875-8238

FINANCE DEPARTMENT
100 CIVIC CENTER PLAZAFC'D MAY
LOMPOC, CALIFORNIA 93435

2 2008

No. 67949

DATE

22-APR-08

REVENUE

53-40-40053-46591

70.862.17 -60.212.72

-64

60,125.35 -17,826.43

29,672.50

VVCSD 3757 CONSTELLATION ROAD LOMPOC, CA 93436

SCRIPTION		CHARGE	TOTAL
MARCH 2008 MARCH 2008 ESTIMATE APRIL 2008 ESTIMATE LESS 1/4 CREDIT DUE FOR OVERPY PLUS 1/4 OF DEBT SVC FOR FY 07		70,862.17 -60,212.72 60,125.35 -17,826.43 29,672.50	82,620.8
	MAY -6 14768	2008	

ALL BILLS ARE DUE AND PAYABLE UPON PRESENTATION—RETURN CANARY COPY WITH PAYMENT ORIGINAL

Than You



To:

REMIT TO:

FINANCE DEPARTMENT REC'D MAR 17 2008

100 CIVIC CENTER PLAZA LOMPOC, CALIFORNIA 93438

805-875-8238

INVOICE

No. 67598

DATE

031308

REVENUE

53-40-40053-46591

63,790.57

-45,188.45 60,212.72

-17,826.43

29,672.50

VVCSD 3757 CONSTELLATION ROAD LOMPOC, CA 93436

SCRIPTION	CHARGE	TOTAL
FEBRUARY 2008 ESTIMATE MARCH 2008 ESTIMATE LESS 1/4 OF CREDIT DUE FOR OVERPYMT IN FY 06/07 PLUS 1/4 OF DEB SERVICE FOR FY 07/08 TOTAL AMOUNT DUE APR -7 2008	63,790.57 -45,188.45 60,212.72 -17,826.43 29,672.50	90,660.9

ALL BILLS ARE DUE AND PAYABLE UPON PRESENTATION-RETURN CANARY COPY WITH PAYMENT **ORIGINAL**





REMIT TO:

FINANCE DEPARTMENT 100 CIVIC CENTER PLAZA LOMPOC, CALIFORNIA 93438

805-875-8238

REC'D FEB 19 2008

INVOICE

No. 67319

DATE

12-FEB-08

REVENUE

53-40-40053-46591

63, 395, 92

-53, 206, 67

45, 188, 45

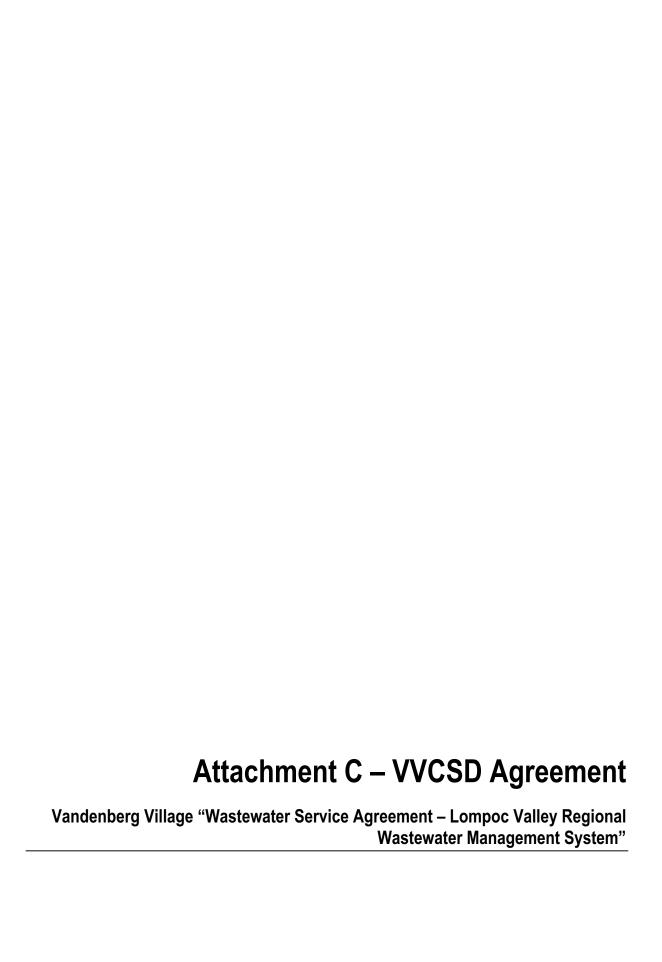
-17,826.43

VVCSD 3757 CONSTELLATION ROAD LOMPOC, CA 93436

SCRIPTION	CHARGE	TOTAL
JANUARY 2008 JANUARY 2008 ESTIMATE FEBRUARY 2008 ESTIMATE LESS 1/4 OF CREDIT DUE FOR OVERPYMT IN FY 06/07 PLUS 1/4 OF DEBT SVC FOR FISCAL YEAR 06/07 01/08 TOTAL AMOUNT DUE	63,395.92 -53,206.67 45,188.45 -17,826.43 29,672.50	67,223.77 67,223.77
MAR - 6 2008		

ALL BILLS ARE DUE AND PAYABLE UPON PRESENTATION—RETURN CANARY COPY WITH PAYMENT ORIGINAL

Thank



June 1, 1974

AGREEMENT

WASTEWATER SERVICE LOMPOC VALLEY REGIONAL WASTEWATER MANAGEMENT SYSTEM

THIS AGREEMENT, by and between PARK WATER COMPANY, a corporation, hereinafter referred to as PWC, LOMPOC UTILITIES SERVICES COMPANY, a corporation, hereinafter referred to as LUS, and the CITY OF LOMPOC, a municipal corporation, hereinafter referred to as CITY.

WITNESSETH:

WHEREAS, projected increases in population and disposal of wastewater require coordinated efforts to properly provide for the collection, conveyance, treatment and disposal of wastewater to protect the health and safety of the public in the Lompoc Valley; and

WHEREAS, the California Regional Water Quality Control Board, Central Coast Region, has imposed waste discharge requirements upon CITY, PWC and LUS, which requirements contemplate the establishment of a Lompoc Valley Regional Wastewater Management System composed of the parties hereto, and which requirements shall become effective upon the completion of the proposed regional system or on June 1, 1975, whichever first occurs; and

WHEREAS, the parties hereto have previously authorized and shared the costs of a preliminary engineering and design study for a Lompoc Valley Regional Wastewater Management System which was performed by the firm of Brown and Caldwell, consulting engineers, Alhambra, California; and

WHEREAS, Brown and Caldwell, Consulting Engineers, have filed their project report entitled "Lompoc Regional Wastewater Management System - Stage 2 Improvements," dated September, 1972, which report recommends a regional wastewater management system composed of the parties hereto and the Federal Correctional Institution, an agency of the U.S. Government; and

WHEREAS, the parties hereto have previously authorized the firm of Brown and Caldwell to proceed with final engineering services in connection with the design and construction of the recommended Lompoc Valley Regional Wastewater Management System - Stage 2 Improvements, and the parties have entered into an agreement for the sharing of costs for said engineering services; and

WHEREAS, CITY, PWC and LUS, each have the power and authority to provide for the collection, conveyance, treatment and disposal of wastewater and have the further power to contract with each other regarding the joint exercise of such powers; and

WHEREAS, CITY owns, operates and maintains existing facilities and LUS and PWC desire to acquire certain capacity rights therein together with certain capacity rights in the proposed regional facilities to be constructed by CITY; and

WHEREAS, the parties hereto are desirous of providing for the apportionment of the costs of engineering, design, construction, reconstruction, enlargement, maintenance and operation of said existing and proposed facilities and for the treatment and disposal of all wastewater, sanitary sewage and industrial waste.

NOW, THEREFORE, IT IS AGREED by and between the parties as follows:

CHAPTER I. DEFINITIONS. The glossary of "Water and Wastewater Control Engineering" published by the Joint Editorial Board Representing the American Public Health Association, American Society of Civil Engineers, American Water Works Association and Water Pollution Control Federation, dated 1969, shall be used in general for definitions of terminology. Other terms are as follows:

- A. PROJECT REPORT A project report prepared by Brown and Caldwell, consulting engineers, Alhambra, California, dated September, 1972 as amended in March, 1974 and entitled "Lompoc Valley Regional Wastewater Management System Stage 2 Improvements." A copy of said report is on file in the office of the City Clerk, City of Lompoc and copies have been supplied to all the parties hereto.
- B. <u>CITY</u> City of Lompoc, a municipal corporation, which owns, operates and maintains existing wastewater disposal facilities, which facilities presently serve the CITY.
- C. LUS Lompoc Utilities Services Company, a corporation, which is a privately owned public utility and which owns, operates and maintains existing wastewater disposal facilities which facilities presently serve the unincorporated urban area commonly known as Mission Hills.
- D. PWC Park Water Company, a corporation, which is a privately owned public utility and which owns, operates and maintains existing wastewater disposal facilities which facilities presently serve the unincorporated urban area commonly known as Vandenberg Village.
- E. CITY EXISTING TREATMENT PLANT Facilities located on 49 acres of City-owned land located approximately at the northeast corner of Central and Bailey Avenues in the City of Lompoc. This facility provides secondary treatment by means of biological filtration and has an average dry weather flow (ADWF) capacity of 1.76 millions gallons per day (mgd).

- F. TREATMENT PLANT EXPANSION The proposed enlargement or expansion of the CITY's existing treatment plant from the present capacity of 1.76 mgd. to 5 mgd. This expansion or enlargement is described as the "recommended project" in the project report and said expansion will be as finally designed and constructed by CITY.
- G. REGIONAL WASTEWATER RECLAMATION PLANT The CITY's existing treatment plant (E) together with the prepared treatment plant expansion (F), having a total average dry weather flow treatment capacity of 5 mgd.
- H. REGIONAL WASTEWATER MANAGEMENT SYSTEM The total system which will include a wastewater conveyance system, the regional wastewater reclamation plant, and a reclaimed water system.

CHAPTER II. EXISTING FACILITIES.

- A. <u>CAPACITY RIGHTS OF LUS AND PWC</u> LUS and PWC shall hereby acquire capacity rights in CITY's existing treatment plant in such manner that, together with LUS and PWC's capacity rights in the treatment plant expansion, they shall have the permitted capacity rights in the regional wastewater management system as set forth in Chapter IV hereof.
- B. PAYMENT OF COSTS LUS shall pay to CITY the sum of \$23,600.00 for capacity rights in CITY's existing treatment plant described herein. PWC shall pay to CITY the sum of \$80,400.00 for capacity rights in CITY's existing treatment plant described herein. Payments to the CITY for these capacity rights shall be amortized as follows: 15 equal annual payments which are based on the above established costs to LUS and PWC with interest on the unpaid balance at the rate of 8.5% per year and which will be totally paid and completely amortized on the date of the 15th payment. Said payments shall commence July 1, 1975 and shall be payable on the 1st day of July each year thereafter until paid in full.

CHAPTER III. NEW FACILITIES.

A. DESCRIPTION OF REGIONAL WASTEWATER MANAGEMENT SYSTEM - The parties hereto contemplate by this agreement, and hereby agree, that the following described facilities shall be designed and constructed by CITY for the benefit of all parties hereto. The facilities proposed to be constructed are those facilities described in the project report, designated "recommended project" commencing on page 57 of said report, except that said facilities shall be as finally designed, constructed, and accepted by CITY. Provided, however, that although facilities proposed for the inclusion of the Federal Correctional Institution were included in said project report, said Federal Correctional Institution has advised the parties hereto that FCI is not to be included in this regional project, and, for that reason, all facilities designed exclusively for the benefit of the Federal Correctional Institution shall be deemed deleted from said project report for the purposes of this agreement.

The new facilities to be designed and constructed are generally described as follows:

- 1. A wastewater conveyance system consisting of approximately 32,740 feet of 8 to 30 inch interceptor sewers and force mains within a regional service area and a raw wastewater pumping station.
- 2. A regional wastewater reclamation plant, together with necessary flood protection, with an initial capacity of 5 mgd average dry weather flow.
- 3. A reclaimed water system, including a pumping station and approximately 18,780 feet of 24 inch reclaimed water transmission main.

The parties hereto agree and acknowledge that CITY has entered into agreements with Brown and Caldwell, consulting engineers, for engineering services for the design and construction of the abovementioned facilities, referred to as the Lompoc Valley Regional Wastewater Management System - Stage 2 Improvements. The parties hereto have heretofore entered into an agreement for the sharing of costs for said engineering services and, by this agreement, hereby ratify said prior cost sharing agreement.

- B. OWNERSHIP OF FACILITIES At all times hereinmentioned, and during the design and construction, and following completion of the construction, CITY shall be the sole and exclusive owner of the total regional wastewater management system described in this agreement and in the project report, including all land, improvements, facilities, and equipment. LUS and PWC hereby agree and acknowledge that they shall have no ownership interest, either jointly or severally, in said system. Provided, however, that LUS and PWC shall have the capacity rights in said system provided by this agreement, together with any and all other rights provided herein for said parties.
- C. RESPONSIBILITY OF CITY CITY shall have the responsibility to design and construct the above mentioned new facilities and to provide a treated effluent that will satisfy the discharge requirements contained in the California Regional Water Quality Control Board, Central Coast Region Order No. 72-62, dated August 11, 1972.
- D. RESPONSIBILITY OF CITY, LUS AND PWC FOR COSTS The parties hereto agree to share the cost of construction, additional land and rights of way, interest on any short-term loans required during construction to meet cash flow requirements and administration associated with the proposed now facilities, after deduction of the federal and state grant funds contributed to the project, in accordance with the following schedule:

Construction costs - the State Water Resources Control Board (SWRCB) will determine the extent of the construction costs that will be eligible for Federal and State grant funds. For those project elements listed in Table 1, the allocation of local construction costs will be based on costs in the awarded contracts and the share indicated in Table 1. For the wastewater interceptor system, each party's share of the construction costs will consist of either (1) their share of the non-eligible costs; or (2) their share of the eligible costs. The share attributable to each party will be calculated on a prorata basis of design capacity for each party. The design capacity for each party is indicated in Table 2.

Additional land and rights of way costs - Allocation based on the share indicated in Tables 1 or 2 of facility associated with the additional land and/or rights of way.

Interest on short-term loans and administrative costs - Allocation based on the total local costs for each party for construction of all facilities, prorata according to the shares of all construction costs determined after award of contracts to construct all facilities listed in Tables 1 and 2.

Table 1. Allocation of Local Costs

·	Alloca	ation, p	ercent
Facility	City	PWC	LUS
Wastewater Reclamation Plant - who are Bid Item A minus Bid Item D minus Bid Item Ea	7 8	17.8 17	5
Mission Hills Pumping Station - Bid Item E ^a	0	0	100
Reclaimed Water System - Schedule 3 plus Schedule 5 minus Bid Items			
I through 7 ^b	67	21	12

As described in the Lompoc Regional Wastewater Reclamation Plant and Mission Hills Pumping Station construction contract.

Table 2. Wastewater Interceptor System

•	Design	n Capac	aty, mgc	
<u>Facility</u> ^a		City	PWC	LUS
	illage Interceptor VV3 - Schedule 1 plus Schedule 2			
	minus Bid Item 8	0	2.5	0
CA1	- Bid Item 8	2.0	2.5	0
Mission Hills	Interceptor			
MH2, MH3	- Schedule 4	0	0	1.5
CA9	- Bid Item 1	2.8	0	1.5
CA8	- Bid Item 2	3.1	0	1.5
CA7	- Bid Item 3	3.7	0	1.5
CA6	- Bid Item 4	4.3	0	1.5
CA5	- Bid Item 5	9.8	0	1.5
CA4	- Bid Item 6	10.3	0	1.5
CA3	- Bid hem 7.	10.6	2.1	1.5
CA2	- Bid Item D ^b	11.4	2.1	1.5

bAs described in the Lempoc Regional Wastewater Reclamation System, Vandenberg Village Interceptor, Mission Hills Interceptor and Reclaimed Water System construction contract.

^aAs described in the Lompoc Regional Wastewater Reclamation System, Vandenberg Village Interceptor, Mission Hills Interceptor and Reclaimed Water System construction contract.

bUnless otherwise noted, as described in the Lompoc Regional Wastewater Reclamation Plant and Mission Hills Pumping Station construction contract.

PWC and LUS shall pay to the CITY, within 30 days after submittal by CITY, their share of the approved construction and other project cost payments with interest to be paid on any unpaid balance at a rate of 8% per annum.

- E. CONTRACT APPROVAL PWC and LUS hereby acknowledge that they have each heretofore approved the contract for engineering services for the design and construction of Lompoc Valley Regional Wastewater Management System Stage 2 Improvements, by and between CITY and Brown and Caldwell. All further contracts and agreements, including plans and specifications, for the design and construction of new facilities shall be prepared or reviewed by CITY and shall be subject to approval by PWC and LUS. Provided, however, that PWC and LUS shall not unreasonably withhold approval of said contracts or agreements.
- F. GRANT APPLICATION CITY shall make application for such federal and state grant funds as may be reasonably available for the engineering, design and construction of the above mentioned regional wastewater management system. Deductions by way of credit for all federal and state grant funding shall be made prior to determining the total local share set forth in Chapter III, paragraph D above. Provided, however, that deduction by way of credit shall be made only for those project elements or facilities which are determined to be eligible for federal/state grant funding.

CHAPTER IV. CAPACITY RIGHTS OF LUS AND PWC.

- A. CAPITAL CONTRIBUTION The amount and percentage of payment of costs by LUS and PWC, as set forth in Chapter III, Paragraph D above, as payment for each one's share of the proposed new facilities, shall be deemed a capital outlay payment by LUS and PWC for purchase of its capacity rights in the proposed Lompoc Valley Regional Wastewater Management System, including CITY's existing treatment plant and all proposed new facilities.
- B. <u>PERMITTED FLOWS</u> At and after commencement of operation of the proposed regional wastewater management system, CITY agrees to permit LUS and PWC to deliver wastewater for conveyance, treatment and disposal up to and including the following flow rates:

Party	Wastewater Reclamation Plant ADWF, mgd	Interceptor Sewer PWWF, mgd
PWC	0.89	2.5
LUS	0.28	1.5

The ADWF for the wastewater reclamation plant shall not average more than the above in any consecutive two week period. The peak wet weather flow (PWWF) shall be that peak rate during any continuous 15 minute period.

C. EXCEEDING PERMITTED FLOWS - Except as otherwise herein provided, the allocated capacity rights of LUS and PWC shall not be exceeded except by mutual agreement of CITY and the party proposing to exceed its capacity rights.

CITY shall have the option, in its sole discretion, to accept wastewater emanating from LUS or PWC in an amount in excess of the above defined permitted flows, provided capacity is available in the Regional Wastewater Management System. The acceptance by CITY of such excess shall in no way constitute an allotment of additional capacity to either LUS or PWC in excess of that provided in Paragraph B above, without express written approval of CITY.

D. IN GENERAL - LUS and PWC shall, by virtue of this agreement, acquire a continuing right for the term hereof to have its wastewater treated and disposed of by CITY as herein provided. Nothing herein, and no use resulting to LUS and PWC by reason of such treatment and disposal, shall be deemed to give any ownership, easement or other property right in any of the existing and proposed facilities or in the lands or easements on which such facilities are located and used in common hereunder, and it shall have no right to claim that it has a right to enter on and pass through said existing system other than the rights herein provided.

CHAPTER V. WASTEWATER QUALITY

- A. <u>REQUIREMENTS</u> All wastewater emanating from LUS, PWC and CITY shall be treated sufficiently by CITY to meet effluent and receiving water requirements established by the State and Federal governments.
- B. MUTUAL RIGHT OF INSPECTION. Each party may inspect and inquire into the manner in which the other is maintaining and operating its wastewater system and controls to the end that it shall be maintained and operated in good working order and repair.
- C. INFLUENT WASTEWATER QUALITY RESTRICTIONS CITY proposes to adopt a waste source control ordinance restricting and controlling the quality of wastewater flowing into the wastewater management system. Each party agrees to comply with the provisions of said ordinance, as finally adopted by CITY, and all amendments thereto. LUS and PWC further agree to establish, enact and enforce tariff and regulations within their respective jurisdictions which will control the quality of influent wastewater and thus insure compliance with the provisions of the above mentioned ordinance.

If influent wastewater quality from LUS and/or PWC does not comply with provisions of the above mentioned ordinance thereby causing the CITY to violate its prescribed effluent and/or receiving water requirements, then the party that is in noncompliance will be liable for its equitable share of any associated costs incurred by the CITY including any civil penalty or other fines which may be assessed against the CITY for such violation.

D. INFLUENT WASTEWATER SAMPLING AND ANALYSIS - As part of the operation of the Regional Wastewater Management System the CITY shall monitor the influent wastewater quality from each party. Three composite wastewater samples shall be taken from each party

during each of the flow meas. g periods referred to in Chapter Paragraph A.3. The composite samples shall be over a 24-hour period and shall be composited proportionately with respect to flow. Sampling devices shall be of types that are mutually approved by the parties. Two of the nine samples collected from each party during the year shall be collected on either a Saturday or a Sunday; the remaining samples shall be collected on days during the remainder of the week. Analyses of the samples shall include, at a minimum, suspended solids (SS) and 5-day biochemical oxygen demand (BOD5). The average strength of the influent wastewater quality (as measured by its SS and BODs) shall be determined by the CITY for each party and this computed average strength shall be used, in conjunction with wastewater flow, in apportioning maintenance, operating and administration costs. The basis for the apportionment shall be the same as, or logically equate to, the basis adopted by the CITY by ordinance or resolution and used by it to vary service charges to high strength users of the system which latter basis shall be adopted pursuant to state and/or federal requirements that users of any municipal sewage treatment system shall be required to bear the costs thereof according to the varying strength of their discharges. Analysis shall be conducted in accordance with the most recent edition of "Standard Methods for Examination of Water and Wastewater", jointly published by the American Public Health Association, the American Water Works Association and the Water Pollution Control Federation.

The CITY may take other samples for analyses of any constituents that would indicate whether or not any party is meeting the restrictions contained in the waste source control ordinance. If a party is not complying with the restrictions, it will be liable for such violation and the CITY has the right to fine the party in accordance with the enforcement provisions of the ordinance.

CHAPTER VI. MAINTENANCE, OPERATION AND REPLACEMENT.

A. RESPONSIBILITIES

- 1. CITY CITY shall maintain, operate and control the Regional Wastewater Management System in a manner that will satisfy existing effluent and receiving water requirements of the State and Federal governments and the California Regional Water Quality Control Board, Central Coast Region Order No. 72-62, dated August 11, 1972. CITY shall use reasonable diligence to provide regular and uninterrupted service to LUS and PWC, but shall not be liable for damages, breach of contract or otherwise to LUS or PWC for failure, suspension, diminution or other variations of service occasioned by or in consequence of any cause beyond its reasonable control.
- 2. LUS AND PWC LUS and PWC shall give reasonable notice to CITY insofar as possible of any material changes proposed in volume or characteristic of sewage to be discharged to the facilities.
- 3. CITY, LUS AND PWC. METERING As part of the Regional Wastewater Management System the CITY shall acquire metering devices and cause to be constructed facilities necessary for the purpose of metering the quantity of LUS, PWC and CITY wastewater delivered to the said Wastewater Reclamation Plant. Said metering devices and any necessary facilities shall be of sufficient capacity to measure the quantity of wastewater contemplated by this agreement and shall be of a quality agreed upon by the parties hereto. Said devices shall be of the type and be located in a manner to be mutually approved by the parties.

At a minimum, wastewater flows from the CITY, PWC and LUS shall be metered on three separate occasions during the year; each flow measuring period shall be for a duration of two weeks. Wastewater flows from each party do not have to be measured concurrently, however, the flows shall be measured continuously for the two week period. Wastewater flows shall be measured at some time during the months of 1) July/August, 2) October/November, and 3) April/May. The average wastewater flow measured during the six week period shall be determined by the CITY for each party and the ratio of these computed average daily flows (in mgd) shall be used, in conjunction with wastewater quality, in apportioning maintenance, replacement, operating and administration costs.

The CITY may measure the wastewater flow during periods of wet weather to determine actual PWWF rates. If these rates indicate that the party is exceeding the permitted PWWF rates referred to in Chapter IV, paragraph B and this is being caused by an infiltration/inflow rate greater than 1,000 gallons per acre per day (gad), the said party shall expend reasonable efforts to assure that the infiltration/inflow rate is reduced to less than 1,000 gad.

CITY shall keep and maintain the records and readings of the metering devices and said devices and records shall be at all times open to the inspection by any party upon reasonable notice to CITY.

B. FUTURE FACILITY REQUIREMENTS.

If it shall be necessary for CITY to improve wastewater treatment or the effluent thereof, due to laws, regulations or requirements by higher authorities including the State and Federal Governments, or if it shall be necessary to install additional facilities or to improve or extend or enlarge any part of said facilities used to serve CITY, LUS and PWC, the cost thereof shall be apportioned among and paid by the parties hereto in the ratio that the required additional facilities are attributable to the requirements of the parties hereto, and said improvements or extensions shall be subject to such other terms and conditions as are agreed upon by the parties hereto at the time they are required. A final official order in proper form by any such authority shall be considered conclusive by the parties hereto as to the necessity of an expenditure of funds for such improved treatment or for such additional facilities.

C. MAINTENANCE, OPERATION AND REPLACEMENT COSTS.

1. DEFINITION. Maintenance and operation costs shall include the cost of labor (including social security, retirement and other taxes and employee benefits such as vacation, sick leave and hospitalization and such other direct labor costs as are incurred in the operation and maintenance of said facilities), materials, chemicals, utilities, supplies, equipment, engineering and other expenses of operation and maintenance of the said Regional Wastewater Management System, including CITY's administration thereof. Administration costs shall be deemed to be 10% of the maintenance and operation costs as hereinabove defined. Replacement costs of said facilities shall include an annual amount attributed to depreciation of buildings, fixtures and equipment in accordance with generally accepted accounting principles and requirements of the State Water Resources Control Board.

- 2. DETERMINATION. LUS and PWC shall pay to Cry its proportionate share of said maintenance and operation costs, administrative and replacement costs on an equitable basis considering the average wastewater flow from each party (as determined in Chapter VI, Paragraph A.3) and the average wastewater quality (as determined in Chapter V, Paragraph D); except that, as to the Vandenberg Village Interceptor described in Table 2, Section D of Chapter III, any such costs caused thereby shall be paid by PWC, and, as to the Mission Hills Interceptor described in Table 2, and Mission Hills Pumping Station described in Table 1, Section D of Chapter III, any such costs caused thereby shall be paid by LUS.
- 3. EXTRAORDINARY COSTS. In addition to ordinary maintenance, operation, replacement and administrative costs, LUS, PWC and CITY shall pay any reasonable and necessary extraordinary costs incurred or to be incurred in assuring effective operation of the system, in the ratio of their respective average actual use of the regional wastewater reclamation plant during the prior fiscal year (July 1-June 30). Provided, however, if such extraordinary costs are more properly attributable to conveyance or treatment of a specific party's influent wastewater, such costs shall be equitably apportioned on such basis.

SARAT. AMENDMENT DID. 5/7/77

4. PAYMENT. Maintenance and operation costs, administrative costs, and replacement costs shall be estimated and budgeted by CITY on an annual basis at the time of adoption, by CITY, of its annual fiscal year budget (July 1 to June 30). A billing statement for the amount estimated to be attributed to each party shall be submitted to LUS and PWC on or before September 1 of each year. Upon receipt thereof LUS and PWC shall pay to CITY their respective amount, as estimated and billed, in 12 equal monthly installments, commencing October 1 and continuously thereafter on the first day of each month until paid. Interest in the amount of 8% per annum shall run only upon any balance not paid within 30 days of the first day of the month upon which it becomes due.

On or before September 1 of each year, the actual apportioned share (considering the measured wastewater flow and strength) of each party shall be determined for the previous fiscal year (July 1 to June 30) and each party shall either be credited or debited, as the case may be, in accordance with the difference between the actual and estimated share for the prior annual fiscal year period. Such credit or debit shall be applied to the billing statement submitted for the current fiscal year, which credit or debit shall either decrease or increase the amount payable by each party for the future billing and payment period.

5. RECORDS INSPECTION. All maintenance, operation, administrative and replacement cost records upon which said statements are to be based shall be available for inspection by LUS and PWC at any time during normal business hours and CITY agrees to make said records available at said time.

CHAPTER VII. LUS AND PWC WASTEWATER RATES.

State Water Resources Control Board Clean Water Grant Program Regulations require that all participating agencies in a grant funded project implement a revenue program that complies with the SWRCBRevenue Program Guidelines for Wastewater Agencies. LUS and PWC agree to develop a proposed wastewater rate structure that complies with PL 92-500, Federal Water Pollution Control Act Amendments of 1972 and its rules and regulations formulated by the Environmental Protection Agency as interpreted by the guidelines. LUS and PWC further agree to forthwith submit said proposed wastewater rate structure to the State of California Public Utilities Commission for approval and expend reasonable and good faith efforts to secure said approval.

CHAPTER XX. EFFECTIVE DATE OF AGREEMENT.

City Attorney

The effective date of this agreement shall be June 1, 1974.

IN WITNESS WHEREOF, the Regional Wastewater Management System has caused this instrument to be executed by its respective officials.

ATTEST:	CITY OF LOMPOC
/s/ Wilma Thomas City Clerk	By: /s/ E. C. Stevens Mayor
(Corporate Seal)	LOMPOC UTILITIES SERVICE
	By: /s/ Diana Williams President
	PARK WATER COMPANY
(Corporate Seal) APPROVED AS TO FORM:	By: /s/ Kenneth E. Dodd Vice-President
/s/ Alan D. Davidson	

AGREEMENT (Wastewater Management System, Park Water Company)

THIS AGREEMENT is made by and between Park Water Company, a corporation, hereinafter referred to as PWC, and the City of Lompoc, a municipal corporation, hereinafter referred to as CITY.

RECITALS

WHEREAS, the CITY and PWC entered into a contract on June 1, 1974 for participation in the regional wastewater management system agreed to be established and paid for under said contract, and the construction time for said system has been extended 20 months and the reclaimed water system thereunder has been temporarily abandoned, and

WHEREAS, the parties hereto have need of further and additional terms and conditions governing their relationship, and

WHEREAS, the California State Water Resources Control Board has published guidelines for the equitable apportionment of costs relating to the transportation and treatment of sanitary sewage and industrial waste and the computation of total revenue requirements for grant funded wastewater facilities entitled "Revenue Program Guidelines for Wastewater Agencies" dated September, 1974 which are applicable to the Lompoc Valley Regional Wastewater Facilities,

NOW, THEREFORE, the parties hereto in consideration of the following promises, covenants and conditions do hereby agree as follows:

l. Referring to Chapter II, Subsection B of said contract, payment of costs, the payment therein provided to be paid to CITY by PWC shall be governed by the following provisions:

PWC shall pay to CITY the sum of \$80,400 for capacity rights in the CITY's existing treatment plant therein described in 16 annual payments. Payment to the CITY for these capacity rights shall include interest on the unpaid balance at the rate of 8.5 percent per year accruing from date of connection to the treatment plant. The first payment shall be payable on June 30, 1977 and shall consist of interest accrued through that date. The 15 remaining payments shall be in the amount of \$9,682 each payable June 30, 1978 and June 30 each year thereafter with the principal amount being fully paid on the date of the 15th such payment.

2. Any provision in said contract (Paragraph VI, C.4) to the contrary notwithstanding, maintenance and operation charges shall be handled as follows:

Payments due CITY are for the principal portion of amounts payable for capacity rights in CITY's existing treatment plant as specified in Chapter II, Paragraph B of this Agreement. These payments are due to the CITY to discharge PWC's duty to pay \$80,400 to the CITY under Chapter II, Subsection B of this contract and these payments shall be made whether or not PWC's customers pay user charge contributions, connection charges or any other fees or charges and whether or not PWC has paid any sums into the WCRF and payment will not depend upon the balance in PWC's sub-account.

Debt principal payments as follows to the City of Lompoc are due annually on June 30th and shall be made as of that date:

YEAR	AMOUNT	YEAR .	AMOUNT	YEAR	AMOUNT
1978	\$2,848	1983	\$4,282	1988	\$6,439
1979	3,090	1984	4,646	1989	6,986
1980	3,353	1985	5,041	1990	7,580
1981	3,637	1986	5,470	1991	8,224
1982	3,947	1987	5,934	1992	8,923

Payments to Pacific Mutual Insurance Company, due October 25th each year, are as follows:

YEAR		AMOUNT
1977 through 1997		\$ 12,786.00
1998	,	144,908.00

Disbursements from the WCRF of amounts due shall be made to PWC at least five days prior to the date for payment to the Pacific Mutual Insurance Company.

The delayed payments to and disbursements from the WCRF as provided herein shall be specifically approved by the State Water Resources Control Board or staff.

- 5. In lieu of the allocation percentages shown in Table 1 and in Table 2 of Chapter III, D, PWC shall be responsible for 17.8 percent of the local costs of the water reclamation plant and of system engineering studies, and for 100 percent of the local eligible costs of the Vandenberg Village Interceptor.
 - 6. Any funds advanced by PWC or CITY in excess of its computed local share of construction, engineering, administration, start-up and metering costs following audit of said costs and final

grant payments shall be considered as short term loans. Interest on such funds shall be computed at the rate of 8 percent per annum with such interest expense to be shared in accordance with the provisions of the basic agreement.

PARK WATER COMPANY

(Corporate Seal)

Daniel M. Conway

Title Vice-President

CITY OF LOMPOC

By Charlotte Benton

ATTEST:

Welma Thomas

Wilma Thomas, City Clerk, City of Lompoc

APPROVED AS TO FORM:

Alan D. Davidson, City Attorney

Signed May 3, 1977



LOMPOC GIVY OF

March 2, 1978

Mr. Dan Conway
Park Water Company
Post Office Box "J"
Downey, California 90241

Re: Revision to Agreement of June 1, 1974.

Dear Dan:

Please indicate your approval of deletion of the second sentence in Chapter VI, section C. paragraph 1. Definition of our agreement effective June 1, 1974 which reads as follows, "Administration costs shall be deemed to be 10% of the maintenance and operation costs as hereinabove defined."

The reason for the request is twofold:

- a. Increasing costs to monitor and comply with new federal regulations.
- b. The sentence conflicts and was superseded by the first paragraph on page 2 of our agreement which amended the subject agreement.

Marvin D. Loney
Budget Officer

MDL/pmn

APPROVED:

APPROVED:

CITY OF LOMPOC

PARK WATER COMPANY

d : E

Daniel M. Conway

Vice-President

Revenue Requirements

March 28, 1978

CONSENT

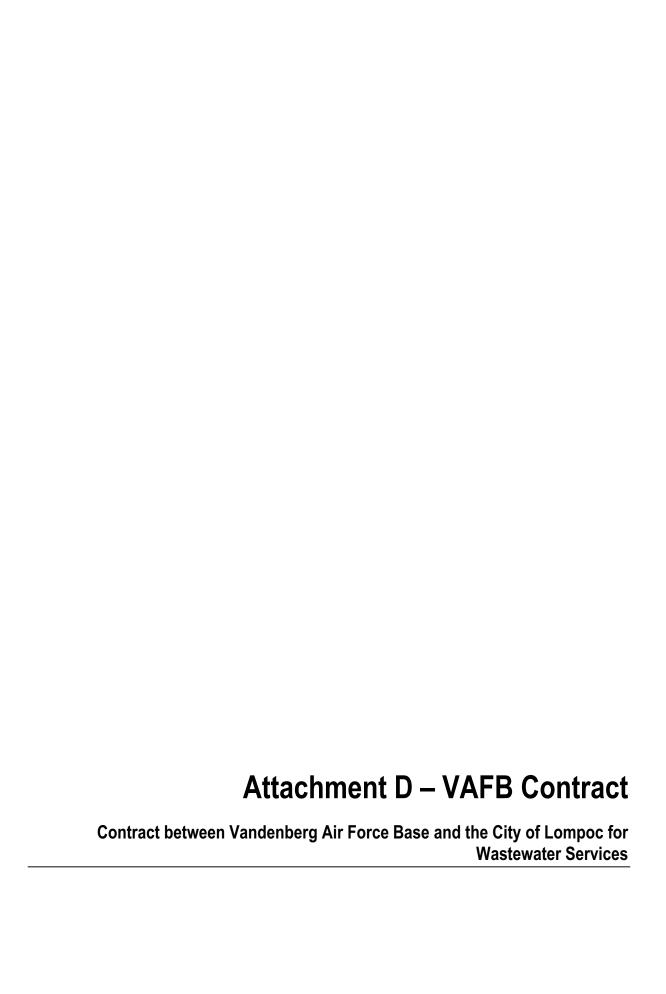
The CITY OF LOMPOC (the "City"), a municipal corporation, hereby consents to the proposed assignment by PARK WATER COMPANY ("Park"), a California corporation, to the VANDENBERG VILLAGE COMMUNITY SERVICES DISTRICT (the "District") of that certain Waste Water Service Agreement effective June 1, 1974, among Park, the City and LOMPOC UTILITIES SERVICE COMPANY, and to the assumption by the District of all of Park's obligations and responsibilities thereunder.

Dated: November 16 , 1988 CITY OF LOMPOC

Ву

Marvin D. Loney

Its Mayor



Date: .78JUL01 Contract F04684 78 D0008 Page 14 of 14

CONTRACTUAL CONTENTS

This contract consists of the following:

- a. Utility Service Contract, 14 Pages, dated 78JUL01
- b. Special Provisions, 10 Pages, dated 78JUL01
- c. Exhibit A-1, Sewage Service Specifications, 1 Page, dated 78JUL01
- d. Exhibit A-1-1, Area Drawing, showing point of delivery, dated 78JUL01 2 Sheets
- e. Exhibit A-1-2, One Line Diagram, dated 78JUL01, 1 Sheet
- f. Exhibit B-1, Rate Schedule, 3 Pages, dated 78JUL01
- g. Exhibit C. Connection and Connection Privilege Charge Clause, 1 Page,
 dated 78JUL01
- h. Exhibit C-1, Installed Facilities and Connection Privilege Charge Cost Breakdown, 1 page, dated 78JUL01

UTILITY SERVICE CONTRACT					
Purchase Reque	\$t FQ461	0 7045 0002 SERVICE CONT	RACT	F04684 78 DC	8000
PREMISES TO BE SERV		CITY		COUNTY	STATE
Vandenberg Air	Force				1
Base, Californi	a	Lompoc		Santa Barbara	California 93437
CONTRACTOR			CONTRACT	OR'S ADDRESS (Include	Zip Code)
			119 We	est Walnut Avenu	e
City of Lompoc			Lompoo	c, CA 93438	
PREMISES ARE		SYMBOL NUMBER OF LEAS	E	NAME OF LESSOR	
	OVERNMENT EASED	N/A		N/A	
ESTIMATED ANNUAL COST HEREUNDER		BILLS WILL BE RENDERED		PAYMENTS	WILL BE MADE
	₹0 4392	AEROSG/DEEE		вч	
s 223,700	(Base	Civil Engineer)		Accounting & F	inance Officer
(Estimated)	AT			TA	
s \53,000.00	Vandenbe	erg AFB, CA 93437		Vandenberg AFB	, CA 93437
TERMINATION LIABILE		PRIATION CHARGEABLE (All	orders for d	elivery of services hereur	der will contain a cit-tion of
s NONE .	Conne	ction Charge 57X33	00 247 1	6717 P321 7-367	\$594100 \$55,000.00
This contract is negot	ialed pursua	nt to 10 U.S.C. 2304(a) dO).		
THIS CONTRACT, en		7000601			STATES OF AMERICA.
hereinafter called the	Government,	represented by the Contract	ting Office	er executing this contr	act, and <u>City ot</u>
Lompoc, a munic	ipal cor	poration, organized	d and ex	disting under th	e laws of the State
whose address is 119 W. Walnut Ave, Lompoc, CA 93438 . hereinafter called the Contractor.					
•	•	the terms and conditions l			
Government shall pure		e:ve <u>sewage</u> the premises to be served h			service) requested by the
Š.		echnical Provisions and the			service specifications
ettached hereto and m		,	·	sewage	
TERM OF CONTRACT	Γ. This contr	act shall continue in effect	until termi	inated at the option of t	he Government by the
TERM OF CONTRACT. This contract shall continue in effect until terminated at the option of the Government by the giving of written notice not less than ninety (90) days in advance of the effective date of termination. (SEE 3P-03					
IN WITNESS WHEREO	F, the partie	s hereto have executed this	contract a	s of the day and year i	irst above written, du? 21
				UNITED STATES (OF AMERIC:
City of Lompoc	Califo	rnia		0	
OLLY OF BOMPOC	Name of Cor				
	/ _ /			_	
By Ise X	$4. \supset /$	3 8 0 11 6 3	BY	Seren S	78 Nov 02
3.	Signati	ure .		Sygnature of Contract	·
\				Signature of Community	
Joe H. Val	encia			JOSEPH A ZIELT	ÍSKT
<u> </u>	Typed N	iame		Typed Name of Co	
i '	- 5,000			-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
TITLE Mayor					
					
•	NERAL PRO		contract co	ommencing with the bill furnished and continue	ing period in which service ng until this contract is
1. DEFINITIONS (194)) FFR\ A=	ad throughout this cont-	ing muchanity	reminined and continuit	ang until this contract is -

DEFINITIONS (1962 FEB) As used throughout this contract, the following terms shall have the meanings set forth below;

a. The term "Head of the Agency" or "Secretary" means
the Secretary, the Under Secretary, any Assistant Secretary,
or any other head or assistant head of the executive or military department or other Federal agency; and the term "his
duly authorized representative" means any person or persons
or board (other than the Contracting Officer) authorized to act
for the Head of the Agency or the Secretary.

for the Head of the Agency or the Secretary,
b. The term "Contracting Officer" means the person executing this contract on behalf of the Government, and any othe officer or civilian employee who is properly designated Contracting Officer; and the term includes, except as otherwise provided in this contract, the authorized representative of a Contracting Officer acting within the limits of his authority

c. Except as otherwise provided in this contract, the term "subcontracts" includes purchase orders under this contract.

2. PAYMENT a. The Contractor shall be paid by the designated disbursing officer for service furnished hereunder at the rates specified; provided, that the Government shall be liable for the minimum monthly charge, if any, specified in this

contract commencing with the billing period in which tervice is initially furnished and continuing until this contract is terminated, except that the minimum monthly charge shall be equitably prorated for the billing period in which regumnerate and termination of this contract shall become effective.

b. Payments hereunder shall be contingent upon the availability of appropriations therfor and shall not be made in advance of the service rendered.

c. All bills for service shall be paid without penalty or interest and the Government shall be entitled to any discounts customarily applicable to payment of bills by all customers of the Contractor.

d. Invoices for service rendered hereunder shall contain statements of the meter readings at the legimning of the billing period, meter constants, consumption during the billing period, and such other pertinent data as shall be required by the Government.

e. The Contractor hereby declares that rates are not in excess of the lowest rates now available to any existing or prospective customer under like conditions of service, or of the same classification, and agrees that during the life of this contract the Government shall continue to brilled at the lowest available rate for similar conditions of service.

Date: 78JUL01 Contract F04684 78 D0008 Page 8 of 10

SP-10 - Permitted Flows (Continued)

The Contractor may check the wastewater flow during periods of wet weather to determine actual PWWF. If these rates indicate that the Government is exceeding the permitted PWWF referred to, the Government shall expend reasonable efforts to assure that the infiltration/inflow rate is reduced.

SP-11 - Notification of Unusual Influent

The Government agrees that when unusual influent will result from actions taken by the Government or Government's contractors, notification will be given to the Contractor at the earliest possible time, and in no case less than eight hours previous. These unusual influents include, but are not limited to, sewage main cleaning and roding, swimming pool dumping, industrial waste dumping, and other similar actions.

SP-12 - costs of Compelled Upgrading

If it shall be necessary for the Contractor to improve wastewater treatment or the effluent thereof, due to laws, regulations or requirements by higher authorities including the State and Federal governments, then Government shall participate on a proportionate basis in the cost of said improvements or additional facilities required by any such Federal, State regulatory body or agency. The proportionate cost of any construction or addition to the contractor's plant that the Government must pay for is subject to approval and appropriation by Congress. If Congress does not appropriate funds for the construction or addition to the contractor's plant, the Government will renegotiate the rate to cover the proportionate cost.

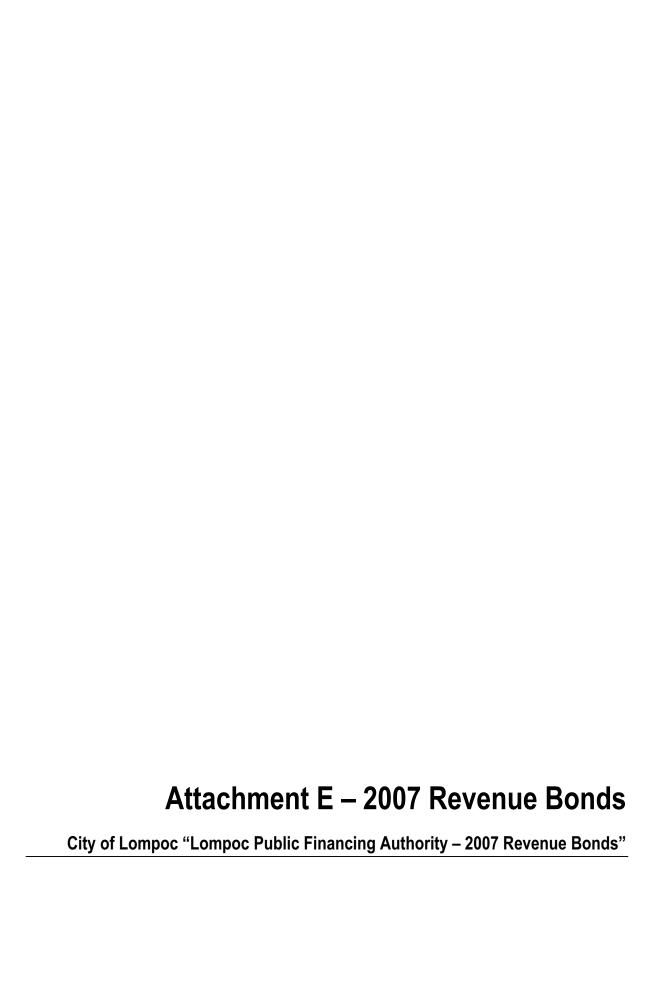
SP-13 - Rates and Charges

Rates and charges, cost calculations, etc shall be as provided in the attached Sewage Service Specifications and Exhibit B-l thereto.

Capital Recovery Charges shall be zero and the parties hereto shall cooperate in obtaining any necessary governmental waivers of any requirement for Contractor to charge, and Government to pay, for Capital Recovery Charges.

This agreement and the charges and rates to be paid by Government are consistent with the Revenue Program Guideline for Wastewater Agencies of the California State Water Resources Control Board (SWRCB) and the "fair and equitable" clause of Contractor's Clean Water Grant. The parties will cooperate in securing approval of this agreement by the SWRCB and a determination by the Environmental Protection Agency (EPA) that it conforms to the requirements of the "fair and equitable" clause.

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NEW ISSUE - FULL BOOK-ENTRY

INSURED RATING: Moody's: "Aaa" UNDERLYING RATING: Moody's: "A3"

See "Ratings"

In the opinion of Jones Hall, A Professional Law Corporation, San Francisco, California, Bond Counsel, subject, however to certain qualifications described herein, under existing law, the interest on the 2007 Bonds is excluded from gross income for federal income tax purposes and such interest is not an item of tax preference for purposes of the federal alternative minimum tax imposed on individuals and corporations, although for the purpose of computing the alternative minimum tax imposed on certain corporations, such interest is taken into account in determining certain income and earnings. In the further opinion of Bond Counsel, such interest is exempt from California personal income taxes. See "TAX MATTERS."

\$17,080,000 LOMPOC PUBLIC FINANCING AUTHORITY 2007 Revenue Bonds (Water and Wastewater Projects)

Dated: Date of Delivery

Due: March 1, as shown on inside cover

Authority for Issuance. The bonds captioned above (the "2007 Bonds") are being issued by the Lompoc Public Financing Authority (the "Authority") under a resolution adopted by the Board of Directors of the Authority on December 5, 2006, and an Indenture of Trust, dated as of January 1, 2007 (the "Indenture") by and between the Authority and U.S. Bank National Association, as trustee for the 2007 Bonds (the "Trustee"). Under this authority, the 2007 Bonds may be issued in a principal amount not to exceed \$20,000,000. See "THE 2007 BONDS – Authority for Issuance."

Use of Proceeds. The 2007 Bonds are being issued to provide funds to (i) acquire and construct improvements to the municipal enterprise owned and operated by the City of Lompoc (the "City") for the supply, treatment and distribution of water (the "Water System"), (ii) acquire and construct improvements to the municipal enterprise owned and operated by the City for the collection, treatment and disposal of wastewater (the "Wastewater System"), (iii) provide a reserve account for the 2007 Bonds, and (iv) pay the costs of issuing the 2007 Bonds. See "FINANCING PLAN."

Security for the 2007 Bonds. The 2007 Bonds are payable from and secured by a first pledge of and lien on "Revenues" received by the Authority under an Installment Sale Agreement dated as of January 1, 2007, by and between the City and the Authority, consisting primarily of installment payments (the "Installment Payments") made by the City under the Installment Sale Agreement. The City's Installment Payments are payable from and secured by "Net Revenues" of the Water System and the Wastewater System, which are generally defined as "Gross Revenues" received from the Water System and the Wastewater System, minus the amount required to pay all "Operation and Maintenance Costs" of the Water System and the Wastewater System. The 2007 Bonds are also secured by certain funds on deposit under the Indenture. See "SECURITY FOR THE 2007 BONDS."

Parity Obligations. The Installment Payments are payable on a parity with (a) installment payments (the "1998 Installment Payments") payable by the City as the purchase price under an installment sale agreement dated as of July 1, 1998, between the Authority and the City, (b) installment payments (the "2005 Installment Payments") payable by the City as the purchase price under an installment sale agreement dated as of March 1, 2005, between the Authority and the City, and (c) an outstanding Wet Well Loan (the "Wet Well Loan") obtained by the City from the U.S. Department of Commerce, Economic Development Administration, in 1978. The City may issue or incur additional obligations and bonds on a parity with or subordinate to the Installment Payments, the 2005 Installment Payments, the 1998 Installment Payments and the Wet Well Loan, provided that the conditions set forth in the Installment Sale Agreement are met. See "SECURITY FOR THE 2007 BONDS – Additional Debt."

Bond Terms; Book-Entry Only. The 2007 Bonds will bear interest at the rates shown below, payable semiannually on March 1 and September 1 of each year, commencing on September 1, 2007, and will be issued in fully registered form without coupons in the denomination of \$5,000 or any integral multiple of \$5,000. The 2007 Bonds will be issued in book-entry only form, initially registered in the name of Cede & Co., as nominee of The Depository Trust Company, New York, New York ("DTC"). Purchasers of the 2007 Bonds will not receive certificates representing their interests in the 2007 Bonds. Payments of the principal of, premium, if any, and interest on the 2007 Bonds will be made by to DTC, which is obligated in turn to remit such principal, premium, if any, and interest to its DTC Participants for subsequent disbursement to the beneficial owners of the 2007 Bonds. See "THE 2007 BONDS – General Provisions."

Redemption. The 2007 Bonds are subject to optional redemption, mandatory redemption from insurance, sale or condemnation proceeds, and mandatory sinking fund redemption prior to maturity. See "THE 2007 BONDS – Redemption."

Bond Insurance. Payment of the principal of and interest on the 2007 Bonds when due will be insured by a financial guaranty insurance policy to be issued by Ambac Assurance Corporation simultaneously with the delivery of the 2007 Bonds.

Ambac

Financial Advisor. This issue has been structured by the following firm as financial advisor to the Authority and the City:



NEITHER THE 2007 BONDS, NOR THE OBLIGATION OF THE AUTHORITY TO PAY PRINCIPAL OF OR INTEREST THEREON, NOR THE OBLIGATION OF THE CITY TO MAKE THE INSTALLMENT PAYMENTS, CONSTITUTE A DEBT OR A LIABILITY OF THE AUTHORITY, THE CITY, THE STATE OF CALIFORNIA OR ANY OF ITS POLITICAL SUBDIVISIONS WITHIN THE MEANING OF ANY CONSTITUTIONAL LIMITATION ON INDEBTEDNESS, OR A PLEDGE OF THE FULL FAITH AND CREDIT OF THE CITY. THE 2007 BONDS ARE SECURED SOLELY BY THE PLEDGE OF REVENUES AND CERTAIN FUNDS HELD UNDER THE INDENTURE. THE 2007 BONDS ARE NOT SECURED BY A PLEDGE OF THE TAXING POWER OF THE CITY.

MATURITY SCHEDULE

(see inside cover)

THIS COVER PAGE CONTAINS CERTAIN INFORMATION FOR QUICK REFERENCE ONLY. IT IS NOT A SUMMARY OF THIS ISSUE OF BONDS. INVESTORS MUST READ THE ENTIRE OFFICIAL STATEMENT TO OBTAIN INFORMATION ESSENTIAL TO THE MAKING OF AN INFORMED INVESTMENT DECISION WITH RESPECT TO THE PURCHASE OF THE 2007 BONDS.

The 2007 Bonds are offered when, as and if issued and received by the Underwriter and subject to the approval as to their legality by Jones Hall, A Professional Law Corporation, San Francisco, California, Bond Counsel. Certain legal matters will also be passed upon for the Authority and the City by Jones Hall, A Professional Law Corporation, as Disclosure Counsel. Certain legal matters will be passed upon for the City by the City Attorney. It is anticipated that the 2007 Bonds will be delivered in book-entry form through DTC on or about February 14, 2007.

The date of this Official Statement is: January 30, 2007

TABLE OF CONTENTS

INTRODUCTION	N	1	Sources of Water Supply	30
FINANCING PLA		4	Historical Water Production and Use	31
The 2007 Wa		4	Water Quality and Environmental Issues	31
	stewater Project	4	Customer Base	32
	urces and Uses of Funds	5	Water Rates and Charges	34
DEBT SERVICE		6	Historical Balance Sheet	37
THE 2007 BONI		7	Historical Revenues and Expenses	39
Authority for I		7	THE WASTEWATER SYSTEM	40
General Provi		7	Background	40
	istration and Exchange	8	Management	40
Redemption	notication and Exchange	8	Service Area	40
Book-Entry O	nly System	9	Wastewater Collection and Treatment System	
	R THE 2007 BONDS	11	Regulations Governing the Wastewater System	
	edge of Revenues	11	regulations coverning the wastewater cyst	43
	ayments; Application of System		Environmental Issues Relating to the	40
Revenues	aymente, replication of Gystem	12	Wastewater System	43
	Budget and Appropriate	14	Customer Base	44
	Revenues by Trustee	14	Wastewater Rates and Charges	46
Reserve Acco		15	Historical Balance Sheet	49
	ation of the City; Obligations	10	Historical Revenues and Expenses	51
Absolute	ation of the City, Obligations	17	COMBINED ENTERPRISE FINANCIAL	51
Rate Stabiliza	ation Fund	18	INFORMATION	52
Additional Pay		18	Capital Improvement Program	52
Rate Covenar		19	Outstanding and Anticipated Water and	52
Additional De		20	Wastewater System Obligations	55
	nsurance, Sale or Condemnatio		Revenue and Expenditure Trends	56
Awards	insurance, Sale of Condemnatio	21	Historical Debt Service Coverage	58
BOND INSURAI	NCE	23	Projected Debt Service Coverage	59
	suant to Financial Guaranty	23	BOND OWNERS' RISKS	61
		23		61
Insurance i	ance Corporation	24	Net Revenues; Rate Covenant Operation and Maintenance Expenses	61
Available Info		24	Limitations on Remedies Available to Bond	01
	of Certain Documents by	2 4	Owners	61
Reference	of Certain Documents by	25	Seismic Considerations	62
	TY ENTERPRISES	26	Loss of Tax-Exemption	62
General	III ENTERPRISES	26		62
	ise Management	26	Proposition 218	64
Budgetary Pro		26	Environmental Regulation	64
	ocess ollection Procedures	26	Secondary Market for Bonds Existing and Future Parity Obligations	65
Financial Stat		27	TAX MATTERS	65
		27		66
Accounting Ba		27	CERTAIN LEGAL MATTERS	67
THE WATER SY	olicy and Portfolio		LITIGATION	
	1 2 I EIVI	29	RATINGS	67
Background		29	CONTINUING DISCLOSURE	67
Management		29 29	FINANCIAL ADVISOR UNDERWRITING	68
Service Area	ion Storogo and Distribution	29		68
	ion, Storage and Distribution	20	PROFESSIONAL SERVICES	69
System	Customer Demand	29		
Capacity and	Customer Demand	30		
ADDENIDIV A.	CHAMARY OF PRINCIPAL LEG) AL BOO!	IMENTO	
APPENDIX A:	SUMMARY OF PRINCIPAL LEG AUDITED FINANCIAL STATEM			
APPENDIX B:	FOR THE FISCAL YEAR ENDE			
APPENDIX C:	FORM OF CONTINUING DISCL			
APPENDIX C.	GENERAL INFORMATION REG			
ALLINDIA D.	AND SANTA BARBARA COUNT		THE OTH OF LOWINGO	
APPENDIX E:	FORM OF OPINION OF BOND			
APPENDIX F:	DTC AND THE BOOK-ENTRY O			
APPENDIX G:	CONSULTING ENGINEER'S RE			
APPENDIX H:	SPECIMEN FINANCIAL GUARA		URANCE POLICY	

FINANCING PLAN

The 2007 Water Project

General. The City intends to use a portion of the proceeds of the 2007 Bonds to f the cost of the "2007 Water Project," which is generally defined as improvements to the L Water Treatment Plant and related improvements to the Water System.

(Under the Indenture, the City has the option of applying the proceeds of the Bonds to any other capital project integral to the Water System.)

The 2007 Water Project is being carried out as part of the City's capital improprogram. See "COMBINED ENTERPRISE FINANCIAL INFORMATION – Capital Improprogram" and "APPENDIX G – Consulting Engineer's Report" for further information planned improvements to the Water System.

Construction of 2007 Water Project. The 2007 Water Project is anticipated complete by approximately March 2008. See "COMBINED ENTERPRISE FIN/INFORMATION – Capital Improvement Program."

The 2007 Wastewater Project

General. The City intends to use a portion of the proceeds of the 2007 Bonds to the cost of the "2007 Wastewater Project," which is generally defined as necessary upg the Lompoc Regional Wastewater Reclamation Plant (the "Wastewater Reclamation which are anticipated to include: improvements that will upgrade the treatment lessecondary to tertiary, including nutrient removal; replacement of the current of disinfection system with ultraviolet disinfection; and the installation of a new (Supervisory Control and Data Acquisition) system. These improvements are designed the City to more consistently and reliably meet new, more stringent discharge required The 2007 Wastewater Project is also anticipated to include the payment of the costs related improvements to the Wastewater System.

(Under the Indenture, the City has the option of applying the proceeds of t Bonds to any other capital project integral to the Wastewater System.)

The 2007 Wastewater Project is being carried out as part of the City's improvement program. See "COMBINED ENTERPRISE FINANCIAL INFORMATION Improvement Program" and "APPENDIX G — Consulting Engineer's Report" fo information on the planned improvements to the Wastewater Reclamation Plant.

Construction of 2007 Wastewater Project. The Wastewater Reclamati improvement project is scheduled to be completed in Fiscal Year 2009-10. See "CC ENTERPRISE FINANCIAL INFORMATION – Capital Improvement Program."

Estimated Sources and Uses of Funds

The estimated sources and uses of funds relating to the 2007 Bonds are as follows:

Sources	S	
---------	---	--

Principal Amount of 2007 Bonds	\$17,080,000.00
Less Net Original Issue Discount	(195,452.35)
Less Underwriter's Discount	<u>(92,118.76)</u>
TOTAL SOURCES	\$16,792,428.89

<u>Uses</u>:

Deposit to Water Account of the Project Fund [1]	\$2,437,028.79
Deposit to Wastewater Account of the Project Fund [2]	13,992,720.85
Deposit to Costs of Issuance Fund [3]	<u>362,679.25</u>
TOTAL USES	\$16,792,428.89

[1] Represents funds to be used to finance a portion of the costs of the 2007 Water Project. See "– The 2007 Water Project" above.

[2] Represents funds to be used to finance a portion of the costs of the 2007 Wastewater Project. See "- The 2007 Wastewater Project" above.

[3] Represents funds to be used to pay Costs of Issuance, which include legal fees, financial advisor's fee, bond insurance premium, reserve account surety premium, printing costs, rating agency fees and other miscellaneous expenses.



TABLE 8-1 Proposal Benefit and Cost Summary				
Project	Total Project Costs	Water Supply and Quality Benefits	Other Benefits	Total Benefits
Cachuma Operation and Maintenance Board South Coast Conduit Upper Reach Reliability Pipeline	\$12,296,842	\$76,008,354	N/A	\$76,008,354
Carpinteria Sanitary District Bluffs Sewer Relocation	\$2,448,109	\$345,021	Non-monetized	\$345,021
3. Carpinteria Valley Water District Central Zone Pipeline Improvements and Demonstration ASR Well	\$3,105,658	\$4,538,463	\$231,144	\$4,769,607
Casmalia Community Services District Water System Retrofit	\$778,511	\$974,802	N/A	\$974,802
5. City of Guadalupe Wastewater Treatment Plant Improvement	\$11,307,007	\$7,816,745	Non-monetized	\$7,816,745
6. City of Santa Barbara Lower Mission Creek Flood Control and Restoration Project	\$2,397,331	Non-monetized	\$4,586,197	\$4,586,197
7. City of Santa Maria Wastewater Treatment Plant Expansion Phase 2	\$23,377,588	\$28,050,643	N/A	\$28,050,643
8. County of Santa Barbara Agricultural Commissioner's Office Santa Ynez River Tamarisk and Arundo Project	\$263,990	Non-monetized	Non-monetized	Non-monetized
9. Cuyama Community Services District Wastewater Treatment Plant Effluent Disinfection	\$338,565	\$193,956	N/A	\$193,956
Cuyama Community Services District Water Supply Improvements	\$382,930	Non-monetized	N/A	Non-monetized
11. Goleta Sanitary District Fairview Avenue/San Pedro Creek Sewer Line Relocation	\$3,283,854	Non-monetized	N/A	Non-monetized

TABLE 8-1 Proposal Benefit and Cost Summary				
Project	Total Project Costs	Water Supply and Quality Benefits	Other Benefits	Total Benefits
12. Goleta Water District ASR San Ricardo Well Rehabilitation Project	\$1,459,927	\$5,588,984	Non-monetized	\$5,588,984
13. Laguna County Sanitation District Recycled Water System Improvement Project	\$3,317,292	\$2,154,265	N/A	\$2,154,265
14. Santa Barbara County Flood Control District Santa Maria River Levee Reinforcement	\$25,092,119	N/A	\$122,750,515	\$122,750,515
15. Vandenberg Village Community Services District Lompoc Regional Wastewater Treatment Plant Upgrade	\$111,356,474	\$13,407,836 \$38,964,679	N/A	\$13,407,836 \$38,964,679
Summary	\$201,206,197	\$139,079,069 \$164,639,912	\$127,567,856	\$266,646,925 \$292,203,768

TABLE 8-31 Project 15 – Benefit and Cost Summary Vandenberg Village Community Services District, Lompoc Regional Wastewater Treatment Plant Upgrade					
Type of Benefit/Cost	Present Value				
Capital and O&M Costs	\$111,356,474				
Quantitative Benefits					
Avoided Regulatory Fines	\$13,407,836				
Agricultural	\$25,556,843				
Qualitative Benefits	Qualitative Indicator				
Water Quality Improvements	++				
Recreational	+				
Environmental	+				
+ indicates net benefits are likely to increase					
++ indicates net benefits are likely to increase significantly					
This is based on qualitative assessment found in description	of benefits.				

EXHIBIT 8	8-02						
			Projects (2006 Dol				
vandenbe	erg Village C	community Service		oc Regional Wastew	ater Reclamation Plant U	Ipgrade ing Calculations	
(a)	(b)	(c)	Costs (d)	(e)	(f)	(g)	(h)
()				lation and Agricultural	(-)	(9)	(/
	Yield Reduc		ianty Standard Vio.	lation and Agricultural	T (10 (A) 1 10		
<u>~</u>		Avoided		Total Cost Avoided	Total Cost Avoided for All Alternatives (Sum of	Discount	Discounted Costs
YEAR	Avoided	Agricultural	Avoided Water	for Individual	Total Cost Avoided for	Factor	(f) ÷ (g)
	Capital Costs	Yield Reduction	Quality Fines	Alternatives	Individual Alternatives)		() ()
	Cosis	Costs		(b) + (c) + (d)			
2007	\$ -	\$ -	\$ -	\$ -	\$ -	1.06	\$ -
2008	\$ -	\$ -	\$ -	\$ -	\$ -	1.12	\$ -
2009	\$ -	\$ -	\$ -	\$ -	\$ -	1.19	\$ -
2010	\$ -	\$ -	\$ -	\$ -	\$ -	1.26	\$ -
2011	\$ -	\$ 234,911	\$ 1,125,000	\$ 1,359,911	\$ 1,359,911	1.34	
2012	\$ -	\$ 459,697	\$ 1,125,000	\$ 1,584,697	\$ 1,584,697	1.42	<u> </u>
2013	\$ -	\$ 674,794	\$ 1,125,000	\$ 1,799,794	\$ 1,799,794	1.50	7 7
2014	\$ -	\$ 880,620	\$ 1,125,000	\$ 2,005,620	\$ 2,005,620	1.59	7 7
2015	\$ -	\$ 1,077,574	\$ 1,125,000	\$ 2,202,574	\$ 2,202,574	1.69	, ,
2016	\$ - \$ -	\$ 1,266,038 \$ 1,446,379	\$ 1,125,000 \$ 1,125,000	\$ 2,391,038 \$ 2,571,379	\$ 2,391,038 \$ 2,571,379	1.79 1.90	
2017			\$ 1,125,000	\$ 2,743,947	\$ 2,743,947	2.01	\$ 1,363,657
2019	\$ - \$ -	\$ 1,618,947 \$ 1,784,076	\$ 1,125,000	\$ 2,909,076	\$ 2,909,076	2.01	
2020	\$ -	\$ 1,764,076	\$ 1,125,000	\$ 3,067,088	\$ 3,067,088	2.13	
2021	\$ -	\$ 2,093,288	\$ 1,125,000	\$ 3,218,288	\$ 3,218,288	2.40	
2022	\$ -	\$ 2,237,972	\$ 1,125,000	\$ 3,362,972	\$ 3,362,972	2.54	
2023	\$ -	\$ 2,376,419	\$ 1,125,000	\$ 3,501,419	\$ 3,501,419	2.69	
2024	\$ -	\$ 2,508,899	\$ 1,125,000	\$ 3,633,899	\$ 3,633,899	2.85	
2025	\$ -	\$ 2,635,668	\$ 1,125,000	\$ 3,760,668	\$ 3,760,668	3.03	\$ 1,242,950
2026	\$ -	\$ 2,756,974	\$ 1,125,000	\$ 3,881,974	\$ 3,881,974	3.21	\$ 1,210,418
2027	\$ -	\$ 2,873,050	\$ 1,125,000	\$ 3,998,050	\$ 3,998,050	3.40	\$ 1,176,048
2028	\$ -	\$ 2,984,123	\$ 1,125,000	\$ 4,109,123	\$ 4,109,123	3.60	\$ 1,140,303
2029	\$ -	\$ 3,090,409	\$ 1,125,000	\$ 4,215,409	\$ 4,215,409	3.82	
2030	\$ -	\$ 3,192,113	\$ 1,125,000	\$ 4,317,113	\$ 4,317,113	4.05	
2031	\$ -	\$ 3,289,434	\$ 1,125,000	\$ 4,414,434	\$ 4,414,434	4.29	
2032	\$ -	\$ 3,382,559	\$ 1,125,000	\$ 4,507,559	\$ 4,507,559	4.55	
2033	\$ -	\$ 3,471,671	\$ 1,125,000	\$ 4,596,671		4.82	
2034	\$ -	\$ 3,556,942	\$ 1,125,000	\$ 4,681,942	\$ 4,681,942	5.11	
2035	\$ - \$ -	\$ 3,638,537	\$ 1,125,000 \$ 1,125,000	\$ 4,763,537 \$ 4,841,615	\$ 4,763,537 \$ 4,841,615	5.42 5.74	
2036	\$ - \$ -	\$ 3,716,615 \$ 3,791,328	\$ 1,125,000	\$ 4,841,613 \$ 4,916,328	\$ 4,841,613 \$ 4,916,328	6.09	
2037	\$ -	\$ 3,862,820	\$ 1,125,000	\$ 4,987,820	\$ 4,987,820	6.45	
2039	\$ -	\$ 3,802,820	\$ 1,125,000	\$ 5,056,231	\$ 5,056,231	6.84	
2040	\$ -	\$ 3,996,693	\$ 1,125,000	\$ 5,121,693	\$ 5,121,693	7.25	
2041	\$ -	\$ 4,059,333	\$ 1,125,000	\$ 5,184,333	\$ 5,184,333	7.69	
2042	\$ -	\$ 4,119,274	\$ 1,125,000	\$ 5,244,274	\$ 5,244,274	8.15	
2043	\$ -	\$ 4,176,630	\$ 1,125,000	\$ 5,301,630	\$ 5,301,630	8.64	
2044	\$ -	\$ 4,231,515	\$ 1,125,000	\$ 5,356,515	\$ 5,356,515	9.15	\$ 585,140
2045	\$ -	\$ 4,284,033	\$ 1,125,000	\$ 5,409,033	\$ 5,409,033	9.70	\$ 557,431
2046	\$ -	\$ 4,334,289	\$ 1,125,000	\$ 5,459,289	\$ 5,459,289	10.29	\$ 530,764
2047	\$ -	\$ 4,382,377	\$ 1,125,000	\$ 5,507,377	\$ 5,507,377	10.90	
2048	\$ -	\$ 4,428,393	\$ 1,125,000	\$ 5,553,393	\$ 5,553,393	11.56	
2049	\$ -	\$ 4,472,426	\$ 1,125,000	\$ 5,597,426	\$ 5,597,426	12.25	
2050	\$ -	\$ 4,514,561	\$ 1,125,000	\$ 5,639,561	\$ 5,639,561	12.99	\$ 434,297

	- Annual Co	osts of Avoided P	•	,	ater Reclamation Plant U	Iparade	
Costs		Discounting Calculations					
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
	Alternative: Avoided Water Quality Standard Violation and Agricultural Yield Reduction Costs				Total Cost Avoided for		
YEAR	Avoided Capital Costs	Avoided Agricultural Yield Reduction Costs	Avoided Water Quality Fines	Total Cost Avoided for Individual Alternatives (b) + (c) + (d)	All Alternatives (Sum of Total Cost Avoided for Individual Alternatives)	Discount Factor	Discounted Costs $(f) \div (g)$
Proposal Life	\$ -	\$ 117,774,700	\$ 45,000,000	\$ 162,774,700	\$ 162,774,700		
	Total Present Value of Discounted Costs (Sum of Column (h))				, , , , , , , , , , , , , , , , , , , ,		
				\$13,407,836 \$38,964,670			
Comment	Box: The ex	pected useful life o	f the project is 40	years.			

TODD ENGINEERS

GROUNDWATER • WATER RESOURCES • HYDROGEOLOGY • ENVIRONMENTAL ENGINEERING

September 23, 1997

MEMORANDUM

To:

T.K. Keller

Vandenberg Village Community Services District

From:

Iris Priestaf

Re:

Evaluation of Water Supply

Introduction

Vandenberg Village Community Services District (District) has provided water supply to the community of Vandenberg Village since December 1988 and now serves nearly 2,140 connections. In recent years, the District has increased the number of water service connections without significantly increasing its groundwater pumping. The District has achieved this efficiency, among other ways, through consumer conservation efforts and its Conservation Plan, which mandates the retrofit (or commensurate fees) of five existing residences for each new residential connection or equivalent connection.

The District also has adopted a Strategic Plan for capital improvements which foresees 600 additional residential units within the planning horizon (buildout). However, the Conservation Plan is incapable of providing sufficient water for buildout because too few existing homes remain to be retrofitted. Accordingly, if the District proceeds toward planned buildout, groundwater pumping would need to be increased.

Numerous investigations of groundwater conditions in the Lompoc Basin have concluded that the basin is in overdraft. In addition, some investigators have indicated that the Lompoc Upland subbasin, from which the District pumps its groundwater, also is in overdraft. Such an overdraft condition would mean that the District water supply (existing or buildout) cannot be

course at 325 AFY; this was simply doubled to include Purisima golf course for a total of 650 AFY. Second, the golf courses were assumed to encompass 90 acres each and to apply 2.3 acre-feet per acre (AF/AC) annually for irrigation, based on average golf courses areas and irrigation application rates in the Carmel, California area. This computation results in a lower estimate of 414 AFY.

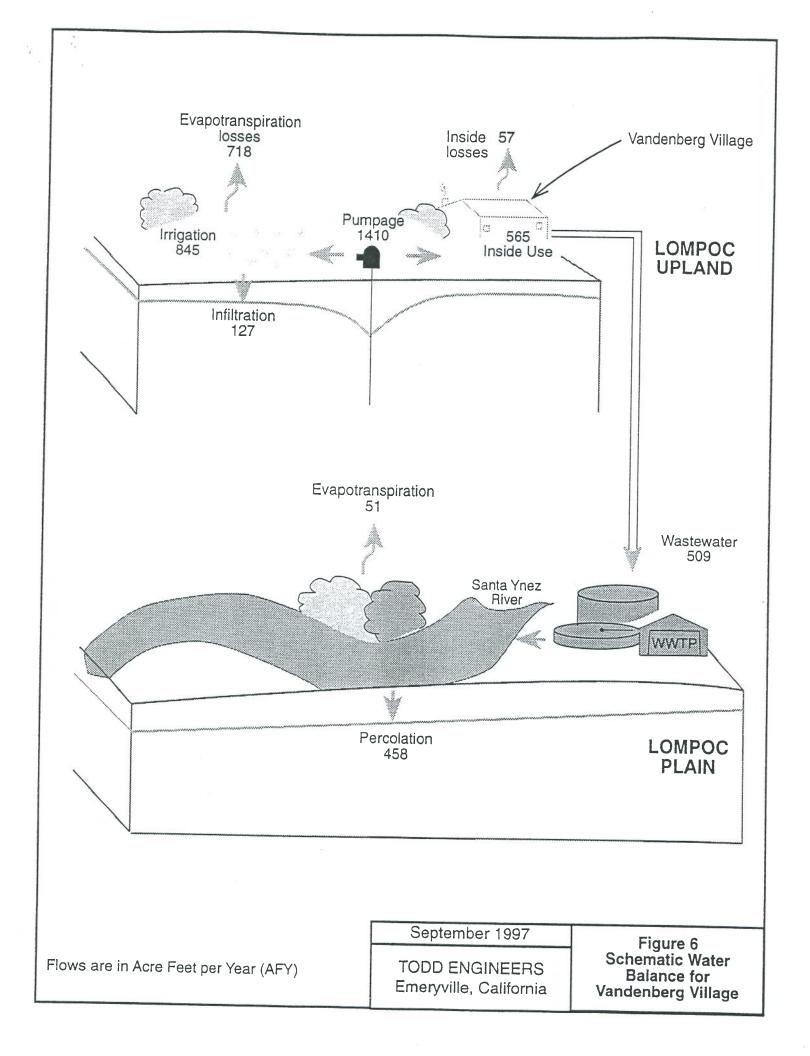
Agricultural pumping was calculated using the estimated irrigated area of 495 acres (675 total acres minus 180 acres for both golf courses). The representative annual irrigation rate is 1.82 AF/AC, derived from the SBCWA Lompoc Upland irrigation rate of 21.87 inches/year (see Table 1). Accordingly, agricultural irrigation pumping is calculated to be 901 AFY.

Total pumping amounts to 2,045 AFY for the municipal pumpers and 1,315 to 1,551 AFY for the irrigators, for a grand total of 3,360 to 3,596 AFY. These amounts represent gross pumping and do not account for return flows to groundwater. For the irrigation groundwater pumpers, a return flow of 20 percent was assumed, consistent with the SBCWA analysis of Buellton rainfall recharge (Ahlroth and Holland, 1995). This means that 80 percent of gross pumping for irrigation was consumed by evapotranspiration. Accordingly, if 1,315 AFY were pumped, 263 AFY percolated to groundwater and 1,052 AFY was consumed.

Figure 6 is a schematic diagram illustrating groundwater consumption and return flows from Vandenberg Village. As shown, 1,410 AFY are pumped by the District; of this amount, 60 percent (845 AFY) is assumed to be used outdoors for landscape irrigation. In this diagram, 15 percent (127 AFY) is assumed as return flow**, while 85 percent (718 AFY) is consumed. Of the indoor use (565 AFY), 10 percent or 57 AFY is assumed to be evaporative losses, while the remainder (509 AFY) is exported from the Upland to the Plain as wastewater. Of this wastewater, which is treated and released to the river, 10 percent is lost to evapotranspiration and 90 percent is assumed to percolate to groundwater in the Plain.

^{*} The amount of return flow is a subject of discussion because of the occurrence of low-permeability zones in Upland sediments. For this study, it is assumed that the low-permeability zones are not areally extensive, and allow eventual percolation to groundwater of both rainfall and return flows. It is acknowledged that return flows are lost to evapotranspiration where the water is close to the ground surface. This occurs in the vicinity of Vandenberg Village, but has not been quantified beyond the evapotranspiration losses by trees and shrubs already included in the SBCWA soil moisture model.

^{**} This is consistent with water balance computations prepared by Todd Engineers for litigation support in Jordan vs. The City of Santa Barbara.





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Farm Water Quality Planning

A Water Quality and Technical Assistance Program for California Agriculture http://waterquality.ucanr.org

This Reference Sheet is part of the Farm Water Quality Planning (FWQP) series, developed for a short course that provides training for growers of irrigated crops who are interested in implementing water quality protection practices. The short course teaches the basic concepts of watersheds, nonpoint source pollution (NPS), self-assessment techniques, and evaluation techniques. Management goals and practices are presented for a variety of cropping systems.



Irrigation Water Salinity and Crop Production

STEPHEN R. GRATTAN, Plant-Water Relations Specialist, University of California, Davis

rrigation water quality can have a profound impact on crop production. All irrigation water contains dissolved mineral salts, but the concentration and composition of the dissolved salts vary depending on the source of the irrigation water. For example, snow melt or water supplies from the Sierra Nevada contain very small amounts of salt whereas groundwater or wastewater typically has higher salt levels. Too much salt can reduce or even prohibit crop production while too little salt can reduce water infiltration, which indirectly affects the crop. An understanding of the quality of water used for irrigation and its potential negative impacts on crop growth is essential to avoid problems and to optimize production. For more information on any of the issues found in this publication, please contact your local University of California Cooperative Extension office.

DISSOLVED SALTS

Dissolved salts in irrigation water form ions. The most common salts in irrigation water are table salt (sodium chloride, NaCl), gypsum (calcium sulfate, CaSO₄), Epsom salts (magnesium sulfate, MgSO₄), and baking soda (sodium bicarbonate, NaHCO₃). Salts dissolve in water and form positive ions (cations) and negative ions (anions). The most common cations are calcium (Ca²⁺), magnesium (Mg²⁺), and sodium (Na⁺) while the most common anions are chloride (Cl⁻), sulfate (SO₄²⁻), and bicarbonate (HCO₃⁻). The ratios of these ions, however, vary from one water supply to another. Potassium (K⁺), carbonate (CO₃²⁻), and nitrate (NO₃⁻) also exist in water supplies, but concentrations of these constituents are comparatively low. In addition, some irrigation waters, particularly from groundwater sources, contain boron at levels that may be detrimental to certain crops.

It should be noted that substantial salinization potential is realized through natural weathering and dissolution of soil parent materials, and these salt contributions will attenuate or augment irrigation water ionic constituents.

CHARACTERIZING SALINITY

There are two common water quality assessments that characterize the salinity of irrigation water. The salinity of irrigation water is sometimes reported as the total salt concentration or total dissolved solids (TDS). The units of TDS are usually expressed in milligrams of salt per liter (mg/L) of water. This term is still used by commercial analytical laboratories and represents the total number of milligrams of salt that would remain after 1 liter of water is evaporated to dryness. TDS is also often reported as parts per million (ppm) and is the same numerically as mg/L. The higher the TDS, the higher the salinity of the water.

The other measurement that is documented in water quality reports from commercial labs is specific conductance, also called electrical conductivity (EC). EC is a much more useful measurement than TDS because it can be made instantaneously and easily by irrigators or farm managers in the field. Salts that are dissolved in water

Table 1. Estimated yield of tree and vine crops with long-term use of irrigation water with different levels of soil salinity (potential yields are based on a 15 to 20 percent leaching fraction and do not account for the effects of specific elements)

		ECw (m	mhos/cm)		
	-	Yield potential ¹			
Tree and vine crops	100%	90%	75 %	50%	Rating ²
Almond	1.0	1.4	1.9	2.8	S
Apple	_		_		S
Apricot ³	1.1	1.3	1.8	2.5	S S
Avocado	_				S
Blackberry	1.0	1,3	1.5	2.5	S
Boysenberry	1.0	1.3	1.8	2.5	S
Cherry			_		S S S
	2.7	4.5	7.3	12.0	T
Date Palm Fig ,					MT
Grape	1.0	1.7	2.7	4.5	MS
Grapefruit	1.2	1.6	2.2	3.3	
.emon	1.0	1.5	2.3	3.6	S
.ime	_			_	S S S
Olive		_			MT
Orange	1.1	1.6	2.2	3.2	S
Peach	1.1	1.5	1.9	2.7	S
Pear					S
Pecan	_				MS
Persimmon	_		_		S
Pistachio			_	_	MS-MT
Plum	1.0	1.4	1.9	2.9	\$
omegranate ³	_		_		MS
Walnut ³			_		S

⁻ Data not available.

Based on data from Maas and Grattan 1999.

Tolerance to soil salinity is rated as sensitive (S), moderately sensitive (MS), moderately tolerant (MT), and tolerant (T).

Tolerance is based on growth or injury rather than yield.

Table 2. Estimated yield of vegetable and row crops with long-term use of irrigation water of different qualities (potential yields are based on a 15 to 20 percent leaching fraction and do not account for the effects of specific elements)

		ECw (mi	mhos/cm)			
	Yield potential				Rating ²	
Vegetable and row crops	100%	90%	75 %	50%	Salt	Boron
Asparagus	2.7	6.1	11.1	19.4	T	VT
Bean	0.7	1.0	1.5	2.4	S	S
Beet, red	2.7	3.4	4.5	6.4	MT	T
Broccoli	1.9	2.6	3.7	5.5	MS	MS
Cabbage	1.2	1.9	2.9	4.6	M	MT
Carrot	0.7	1.1	1.9	3.0	S	MS
Cauliflower	1.9	2.6	3.7	5.5	MS	MT
Celery	1.2	2.3	3.9	6.6	MS	VT
Corn, sweet	1.1	1.7	2.5	3.9	MS	VT
Cucumber	1.7	2.2	2.9	4.2	MS	MS
Eggplant	0.7	1.7	3.1	5.6	MS	
Lettuce	0.9	1.4	2.1	3.4	MS	MS
Onion	0.8	1.2	1.8	2.9	S	S
Pepper	1.0	1.5	2.2	3.4	MS	MS
Potato	1.1	1.7	2.5	3.9	MS	MS
Radish	0.8	1.3	2.1	3.4	MS	
Spinach	1.3	2.2	3.5	5.7	MS	
Squash, scallop	2.1	2.6	3.2	4.2	MS	MT
Squash, zucchini	3.1	3.8	4.9	6.7	MT	MT
Strawberry	0.7	0.9	1.2	1.7	S	S
Sweet potato	1.0	1.6	2.5	4.0	MS	
Tomato	1.7	2.3	3.4	5.0	MS	T
Turnip	0.6	1.3	2.5	4.3	MS	MT

Data not available.

Based on data from Maas and Grattan 1999.

Sensitive (S), moderately sensitive (MS), moderately tolerant (MT), tolerant (T), and very tolerant (VT).

Water Resources

of Santa Barbara County

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Buellton Uplands Groundwater Basin

Physical Characteristics:

The Buellton Uplands Groundwater Basin encompasses about 29 square miles located about 18 miles east of the Pacific Ocean and directly north of the Santa Ynez River. The basin boundaries include the impermeable bedrock of the Purisima Hills to the north, the Santa Ynez River Fault to the south, a limited connection to the Santa Ynez Upland Groundwater Basin to the east and a topographic (drainage) divide with the Lompoc Basin to the west.

The Santa Ynez River Riparian Basin sediments overlie portions of the Buellton Uplands in the southeast part of the basin. Due to the hydrologic gradient (generally north to south), it is likely that the Buellton Uplands Basin discharges into the Santa Ynez River Riparian Basin. The Santa Ynez River Riparian Basin is discussed later in this section.

The SBCWA has estimated average annual rainfall in the basin to be about 16 inches per year.

Water Quality:

Current water quality data for the basin is limited. However, data from late 1950s and early 1960s indicate TDS concentrations between 300 and 700 mg/L for several wells within the basin.

Basin Supply and Demand:

The Buellton Uplands Basin has been a recognized hydrologic unit for decades and is designated on the groundwater basin maps adopted into the *Santa Barbara County Comprehensive Plan* (Santa Barbara County Planning and Development Department, 1994). Until 1990-91, however, this basin was not subject to detailed analysis by either the USGS or the SBCWA. At that time, the SBCWA evaluated this basin and found it to be in a moderate state of overdraft (Baca, 1994). Subsequently, further analysis

of the basin was conducted and the SBCWA (Almy *et al.*, 1995) determined that the basin is in a state of surplus.

Available Storage in the Buellton Uplands Basin is estimated to be 154,000 AF. The total volume of water in storage in this basin is estimated by the SBCWA to be about 1.4 million AF (assumes a specific yield of 10%). Safe Yield for consumptive use (Net Yield) is estimated to be 2,768 AFY (Almy et al., 1995). Based on an estimated average of 26% return flows, Safe Yield for gross pumpage (Perennial Yield) is estimated to be 3,740 AFY. Estimated pumpage from the basin is 2,599 AFY (gross) and 1,932 AFY (net). Thus, the basin is considered by the SBCWA to be in a state of surplus with natural recharge exceeding pumpage by a net 800 AFY. This surplus represents the amount of groundwater from the Buellton Uplands Basin that discharges annually into the Santa Ynez River Riparian Basin.

Recharge to the basin is from deep percolation of rainfall, stream seepage, underflow into the basin from adjacent basins and return flow from agriculture. As stated above, the basin discharges to the Santa Ynez River via natural seepage.

Approximately 80% of the 2,599 AFY of pumpage in the basin is attributable to agricultural irrigation. The remaining 20% is used by the City of Buellton and scattered farmsteads around the rural area.

Lompoc Groundwater Basin

Physical Characteristics:

The Lompoc Groundwater Basin consists of three hydrologically connected subbasins: the Lompoc Plain, Lompoc Terrace, and Lompoc Uplands. Together, these subbasins encompass about 76 square miles. The basin surrounds the lower reach of Santa Ynez River and is bordered on the north by the Purisima Hills, on the east by a topographic

divide (the Santa Rita Hills) with the Buellton Uplands Basin, on the South by the Lompoc Hills and on west by the Pacific Ocean. The Lompoc Plain Alluvial Subbasin is divided into three horizontal zones: an upper, middle and main zone. Based on recent hydrologic and water quality studies, these zones have points of hydrologic continuity and exchange limited amounts of water.

Precipitation within the basin is influenced by orographic effects and other meteorological factors. The maximum average rainfall is about 18 inches and occurs near the southern edge of the basin in the Lompoc Hills; near the Pacific Ocean precipitation averages approximately 10 inches per year. The average rainfall in the City of Lompoc is 13 inches. Rainfall averages about twelve inches per year over the entire basin.

Water Quality:

Water quality in the shallow zone of the Lompoc Plain tends to be poorest near the coast and in heavily irrigated areas of the subbasin. TDS concentrations of up to 8,000 mg/L near the coast were measured in the late 1980s. The poor quality water in this area is attributed to upwelling of poor quality connate waters, reduction in fresh water recharge from the Santa Ynez River beginning in the early 1960s, agricultural return flows, and downward leakage of seawater from an overlying estuary in the western portion of the basin (Bright, et al., 1992). The presence of elevated boron and nitrates (constituents common in seawater and agricultural return flow, respectively) supports this conclusion.

In the middle zone, water samples taken from below agricultural areas of the northeastern Plain contained TDS concentrations averaging over 2,000 mg/L. However, some middle zone groundwater from the western plain exhibited TDS levels below 700 mg/L. Areas of recharge, adjacent to the Santa Ynez River, contained TDS concentrations of less than 1,000 mg/L in the eastern plain. It is believed that leakage from the shallow zone is responsible



Central coast oak woodland

for elevated TDS levels in the middle zone in the northeastern plain.

Groundwater from the main zone exhibited TDS concentrations as high as 4,500 mg/L near the coast. It is thought that contamination of the main zone (mainly near the coast) is due to percolation of seawater through estuary lands and upward migration of poor quality connate waters from the underlying rock. Groundwater of the Lompoc Terrace and Lompoc Upland Subbasin is generally of better quality than that of the Lompoc Plain, averaging less than 700 mg/L TDS. Some of the natural seepage from these subbasins is of excellent quality. For an in-depth discussion of water quality, see the Water Quality section of this report and documents referenced therein.

Groundwater users and public agencies within the basin are working to clarify and resolve water quality concerns.

Basin Supply and Demand:

The supply/demand status of this basin was updated in 1998 (Ahlroth, 1998).

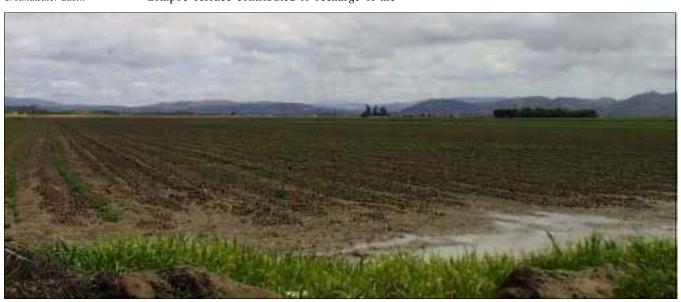
Available Storage within the Lompoc Groundwater Basin is estimated to be approximately 170,000 AF (Santa Barbara County Planning and Development, 1994). Safe Yield is estimated by the SBCWA to be 28,537 AFY (gross or Perennial Yield) and 21,468 AFY (net). Net pumpage or consumptive use from the Lompoc Basin is estimated to be 22,459 AFY. Based on water level trends evaluated in 1998, the basin is in a state of overdraft with net extractions exceeding recharge by 991 AFY.

Groundwater is the only source of water supply within the basin. Agricultural uses account for 70% of the total water consumed within the basin. Municipal uses account for the remaining demand and include the City of Lompoc, the Vandenberg Village Community Services District and the Mission Hills Community Services District.

The general direction of groundwater flow is from east to west, parallel to the Santa Ynez River. Historically, underflow from the Lompoc Uplands and Lompoc Terrace contributed to recharge of the Lompoc Plain. As a result of a long-term decline in water levels, very little underflow will move from the Lompoc Upland to the Lompoc Plain in the future. Localized depressions in the water table occur in areas of heavy pumping. One such area is in the northern part of the Lompoc Plain where the City operates municipal supply wells. Pumping depressions are also present in the Mission Hills and Vandenberg Village areas. Sources of recharge to the basin include percolation of rainfall and stream flow (including Lake Cachuma releases), agricultural water return flow and underflow into the basin.

The City is consulting with upstream entities regarding concern over worsening water quality in the Lompoc Plain. Although the cause of the trend is much debated, future Groundwater Management Plans created in accordance with AB 3030 could address the problem. Both the USGS and the City of Lompoc have developed numerical models of the basin that might be used during the implementation of these plans. In addition, the City of Lompoc has implemented recycling and conservation programs. The City and the Santa Ynez River Water Conservation District have also initiated a Groundwater Management Plan for the Lompoc Plain portion of the basin.

Row crops over the Lompoc Plain portion of the Lompoc Groundwater Basin



In many areas of the county, SWP water is blended with other, lower quality water, which results in a higher overall quality of the water distributed to customers. For the South Coast water purveyors, SWP water is conveyed through Lake Cachuma where it mixes with local surface water. The water is then directed to local water treatment plants, after which it is distributed to customers.

According to the USGS figures for 1998 (Agajanian *et al.*, 1998) the TDS for the rivers in Santa Barbara County range from 518 mg/L to 1,130 mg/L (see below). Water quality sampling was completed in October, April and May of the 1998 Water Year. Some of the variations in water quality seen along the Santa Ynez River are a partial result of the addition of SWP water mentioned above.

Total Dissolved Solids in Local Rivers - 1998

Cuyama Rive	1,130 mg/L
Santa Maria	River1,030 mg/L
Sisquoc Rive	·862 mg/L
Santa Ynez R	ver
at James	on Lake842 mg/L
at Lake (achuma518 mg/L
below La	ke Cachuma 625 mg/L
	(Source: Agajanian et al., 1998

The Health and Safety Code of California State Law plays a role in maintaining surface water quality

throughout California by preventing bodily contact of water that serves as drinking water supply. Sections 115825 (a) and (b) prevent bodily contact with water in Lake Cachuma:

(a) It is hereby declared to be the policy of this state that multiple use should be made of all public water within the state, to the extent that multiple use is consistent with public health and public **safety**. (b) Except as provided in Sections 115840, 115840.5, and 115841, recreational uses shall not, with respect to a reservoir in which water is stored for domestic use, include **recreation** in which there is **bodily contact** with the water by any participant.

For More Information

Carpenter, A.G.; King, N.J. and Montoya, I. 1994. Water Quality Control Plan: Central Coast Region - Region 3. State of California, Regional Water Quality Control Board - Central Coast Region.

Environmental Protection Agency; Water Quality - Surf Your Watershed:

http://www.epa.gov/surf/surf_search.html/

State of California, The Resources Agency, Department of Water Resources, Division of Local Assistance. 1995. *Quality Assurance Technical Document 3: Compilation of Federal and State Drinking Water Standards and Criteria*.

Water Treatment

General Information

Portions of the following information have been adapted from: *The City of Santa Barbara Water and Wastewater Systems Inventory* (1998) and *the City of Lompoc Urban Water Management Plan 1995 - 2000* (1995).

Surface water acquires its characteristics (taste, odor, chemical and mineral make up, temperature, corrosiveness, and clarity) from the environment with

which it has contact. Thus surface water quality varies by location and season. During the late summer and early fall, surface water deteriorates slightly in quality because of the growth of algae. Water taken from surface water supplies may contain various contaminants. Possible contaminants include silts and clays, dissolved minerals and salts, organic material from vegetation and wildlife, algae, bacteria, protozoans, viruses and man-made pollutants. In order to remove these contaminants and to comply with state and federal water quality standards, water is treated before it is distributed for consumption.